```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                US-09-073-362-2
                         Sequence 2, Appli
Sequence 1199, Ap
Sequence 1199, Ap
Sequence 2, Appli
Sequence 2089, Ap
Sequence 347, Appl
Sequence 347, Appl
Sequence 3, Appli
Sequence 7, Appli
Sequence 166, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Appl
Appli
Appli
Appli
Appli
Appli
Appli
Appli
                                                                        October 30, 2003, 04:33:40 ; Search time 114 Seconds (without alignments) 8668.920 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                      1: /cgr2_6/prodata/2/ina/5A COMB.seq:*
2: /cgn2_6/prodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/prodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/prodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/prodata/2/ina/PCTUS COMB.seq:*
6: /cgn2_6/prodata/2/ina/PCTUS COMB.seq:*
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-243-920-2

US-09-016-434-1199

US-09-016-434-1199

US-09-0107-532A-2089

US-09-107-532A-347

US-09-107-532A-347

US-09-801-876B-3

US-09-801-876B-3

US-09-801-876B-3

US-09-801-876B-3

US-09-801-876B-3

US-09-801-876B-3

US-09-801-876B-3

US-09-803-671B-3

US-09-817-818-3

US-09-814-849

US-09-814-849

US-09-817-84-88

US-09-814-849

US-09-814-849-3

US-09-814-86-10

US-09-814-86-10

US-09-814-86-10

US-09-818-88-1166

US-09-818-88-1166

US-09-818-88-1166

US-09-818-88-1166

US-09-818-88-1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-851-896-3
US-09-268-992-7
US-09-657-474-7
US-09-801-876B-3
US-08-965-729A-2
                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                 569978 seqs, 220691566 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                 OM nucleic - nucleic search, using sw model
                                                                                                                                                                           IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                            Issued Patents NA:*
                                                                                                                         US-09-667-170A-440
2239
                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.20

9.4 + 10011

4.0 1254

3.0 1254

2.2 152331

2.2 152331

2.2 152331

2.2 152331

2.2 152331

2.3 152331

2.4 8567

2.0 64467

1.9 64467

1.9 8350

1.9 89500

1.9 89500

1.9 89500

1.9 89500

1.9 89500

1.9 89500

1.9 89500

1.9 89500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        148567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                             Scoring table:
                                                                                                                                                      Seguence:
                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                              Database
                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  υυ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            00000
```

```
Sequence 1, Appli
Sequence 3, Appli
Sequence 11, Appli
Sequence 22, Appli
Sequence 7, Appli
Sequence 7, Appli
                                                                            Sequence 75, F
Sequence 14, F
Sequence 3, Ap
                                                                                                                                                                                                                   Sequence 24,
                                                                                                                 Sequence 23,
                                                                                                                             Sequence 43,
Sequence 43,
                                                                                                                                                     Sequence 2,
                                                                                                                                                                              Sequence 3,
Sequence 6,
                                                                                                                                                                  Sequence
                                                                                                                                                                                                        Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 2072;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 366.4; DB 2;
Pred. No. 5.6e-89;
                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Yue, Henry
APPLICANT: Corley, Neil C.
TITLE OF INVANTION: AMINO ACID PERMEASE HOMOLOG
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                   US-09-539-333D-222
US-09-268-922-7
US-09-461-697-75
US-09-461-697-75
US-09-311-469-33
US-09-811-469-33
                                                                                                                                                                                                                                                                                                                                                                                                                               ACRESTORENCE Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: A
COUNTRY: USA
COUNTRY: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/073,362
                                                                                                                                                              US-09-801-861-3
US-09-813-133A-3
US-09-018-584A-6
US-09-750-580-1
                                                                                                                          US-08-367-841A-43
PCT-US95-07201-43
                                                                                                                                                                                                                  JS-09-018-584A-24
                                                                                                                                                     US-09-875-223-2
                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
FILING DATE:
RRICA APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY, AGENT INFORMATION:
NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,132
REFERENCE, DOCKET NUMBER: 99,132
REFERENCE, DOCKET NUMBER: PF-0514 US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09073362
Patent No. 5942399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 2072 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16.4%;
54.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 650-845-4166
TELEX:
             112047
12047
12047
72604
72604
1825
1825
7218
8 3450
22481
222481
222481
222481
222481
83332
53333
55827
81001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IMMEDIATE SOURCE
```

8

d ò g

ò

g ò dd

ò g -8

```
1452 cagrdaracratekerekerekiedekarrdeekirrdeekierekadeerideekerrria 1511
                                                                                                                                                                                     reredercaccirirarciececrecaaecercarceaccrecrecrecercercaae 1391
                                   CCTCGACAGTCTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGT
                                                                                                                                                                                                                                                                                           cerririciniciosanicircririciocaricircacaricaniciricirio de de de caracteria
                                                                                                                                                                                                                                                                                                                                               1560 TTCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTA
                                                                                 1272 carcricascricarraacracracacricascracrastrorrigiosessicricar
                                                                                                                                                                                                                                        1500 ACTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 2072;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Hillman, Jennifer L.
APPLICANT: Yue, Henry
APPLICANT: Corley, Neil C.
TITLE OF INVENTION: AMINO ACID PERWEASE HOWOLOG
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSER: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 366.4; DB 2;
Pred. No. 5.6e-89;
0; Mismatches 606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/243,920 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY AGENT INFORMATION:
NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,132
REFERICATION NUMBER: PF-0514
TRLECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
PAPELICATION DATA:
APPLICATION NUMBER: 09/073,362
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2, Application US/09243920
Patent No. 5981242
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTATCTCTTTATTATA 1635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1512 CTTCCTCATCATCAGA 1527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 54.6%;
Matches 730; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 2072 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 650-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIAL
LIBRARY: ESC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-243-920-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-243-920-2
                                                                                                                                                                                       1332
                                                                                                                                                                                                                                                                                           1392
                                1380
                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                1620
                                                                           d
                                                                                                                                 ò
                                                                                                                                                                               셤
                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1151
     o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960 TGCAȚATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAA 1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080 AAATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGC 1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1140 AGTGACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGC 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032 renekatriniscaekircaekirindekirariniaacheekarikerenekerenekiree 1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCCCATGATTCATGTCCGCAAGCACAC 1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1152 GGCTCAAGAGAGGCCATCTCCCTGATGCCATCTGCATGATCCATGTTGAGCGGTTCAC 1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTCTACCAGCTGTTATTGTTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGA 1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGT 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTITICAGGAAGAGATICAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTA 959
                                                                                                         251
                                                                                                                                                                                                                                                             CTCTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGAC 479
                                                                                                                                                                                                                                                                                                                                                                                                                  372 refressesecerenterecereinfessesecentristratiscesaacresseseese 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   432 TAAGAAATCTGGGGCCAGCTATGCCTATATCCTGGAGGCCTTTGGAGGATTCCTTGCTTT 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      672 charidddhaccinddiachachiririrchcinaidcinhadhariachichenicae 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTTGAGGGTTCATCATTGCAGTGGGTGACATTGCCCTGGCACTGTACTCAGCTCTGTT 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          852 CTCCTACTCAGGCTGGGACACCCTCAATGTCACTGAAGAGATCAAGAATCCTGAGAG
                                                                                                                                                                                                                                                                                                              312 Troccocaadgererecicararacaerecerectrosererereresereareae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCATTTGGACGCTACATTCTGGAACCATTTTTTTTTTCAATGTGAAATCCCTGAACTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCTGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             732 GGTCATCGTTGCAGGCATTGTTAGACTTGGCCCAGGGAGCCTCTACTCATTTTGAGAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTTGCTGTCTCCAGGTTATTCTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1092 ATTATICCIGITITIGGIGGCCTCAATGCCTCCATTGTGGCTGCTTCTAGGCTTTTTCTTTGT
                                                300 CGCCTTTTCAGGAAGACGCCTTTTCAGGAAGAAAAGTGCAGCTGAAGAAAGT
                                                                                                   192 crcccrrradgreargegeccaeccaageccaaacaagreaageaagaaga
                                                                                                                                                       CACITIACIGAGGGAGICICCAITAICAIIGGCACCAICAIIGGAGCAGGAAICIICAI
                                                                                                                                                                                                          252 Crcacrectraacscorstracrectratrerssearchearcecreascarcrirer
                                                                                                                                                                                                                                                                                                                                                                    GGTGTGTGGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540 AAAGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          carcadacricridacorcecricarearicaringadeceaeceaeceaecearearingecear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 552 CACCTTTGCCAACTACATGGTACAGCCTCTCTTCCCGAGCTGCTTCGCCCCTTATGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     612 CAGCCGCCTGCTGCTGCTGCATTTGTCTCTTAACCTTCATTAACTGTGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAAGACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              912 GAACCIGCCCCICTCCATIGGCATCICCATGCCCATIGICACCATCTATATCTTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            972 caardridecerarraracrerecrasacareasadacarerrideceagrearecretride
        Gaps
        ..
0
Mismatches 606; Indels
  0;
730; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   006
Matches
```

ö

셤

8

g

à

ö

8 8

8 6 8 6 8

8 8 ò DP DP Sy Op

20 da 60 da

0y 1130 COTCOROGRACITITIONALTICCIONALTICONALTICCIONALTICC	Query Match 10.6%; Score 238.4; DB 4; Length 3984; Best Local Similarity 54.7%; Pred. No. 2.6e-54; Matches 498; Conservative 0; Mismatches 406; Indels 6; Gaps 1;
190 CONCENTION CONTRACTOR CONTRAC	1320 TCCTCTACCAGCTGTTATGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGA 1379 

8 6 8 6 8 6 8 6 8 6 8 6

us-09-667-170a-440.rni

```
1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIGITACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCA 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIGCCAGGIGGCITITIATIGGGCIGGCAGIIGCIGGGCIGATITATCTICGALACAAAT 1468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGTCATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTTATTATATGGGACAAGAAAC 1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGCCATTGTCACCATTGGCTATGTGCTGACAATGTGGCCTACTTTACGACCATTAATG 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1169 ATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTG 1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTCTCCATGATTCATGTCCGCAAGCACACTCCTACCAGCTGTTATTGTTTTGCACC 1348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCA 1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rcorcacadadaargarcaacceracaaaaaccrececeraecarcarcarcarcarcice 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 recedardicardacerdardracidadeaacerdeceraciracidadeacerdecea 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    417 ccákácakaridchárcarácakadácairádácaridakariragasakararákacirádáca 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACCATCATCCTCAGCGGGCTGCCCGTCTACTTCGGGGGTCTGGTGGAAAAAAAGC 956
                                                                                                                                                                                                                               117 ccecciaideticeradeceradecerairaireireciadericaiedradaidada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGCCTCTTCCTGATCGCCGTCTCCTTCTGGAAGACACCCGTGGAGTGTGGGCTTCGGCT
                                                                           TCACGGCCGTGAACTGCTACAGGCTGAAGGCCGGCCACCCGGGTCCAGGATGCTTTTGCCG
                                                                                                                                                                                                                                                                                                               GTCAAACGCAGAACTT----TAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGC
                                                                                                                                                                                                                                                                                                                                                                                  GTGATGTGTCCAATCTAGATCCCAAGTTCTCATTTGAAGGCACCAAACTGGATGTGGGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGAGGAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GIGTGITTGCIGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1349 CITTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          717 TCTTCAACTGGCTCTGCGTGGCCCTGGCCATCATCGGCATGATCTGGCTGCGCCACAGAA
TGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACCT
                                                                                                                                                       TITICCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237 acairgracigacariaracagaacacrairidecraracaadaradaariracrigaari
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rcarercriedarcarccrercricerededecherecriecrimedercencareder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           597 recretechical calcada con caracterate de consecuentes de la recrea de consecuencia de la recrea dela recrea de la recrea dela recrea de la recrea del recrea de la recrea de la recrea de la recrea de la recrea del recrea del recrea de la recrea del recrea de la 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   657 rgangakorrecrerangechricherangakoanerecrerenteakorrendager
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGCCTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11, Application US/09489847
Patent No. 6476195
GENERAL INFORMATION:
APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
FILE REFERENCE: PZ031P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAGGTGGTT 1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-489-847-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1229 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                              929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1469
                                                                                                                                                                                                                                                                                                           875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                       q
                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 рp
```

```
1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAAACCATT 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1087 GCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGTTCAAATGCAGTGGCAGTGACT 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                recriredecrecearda Accessor de la recrier con contrata de la contrata del contrata de la contrata de la contrata del contrata de la contrata del contrata de la contrata de la contrata del contrata de la contrata del contrata del contrata de la contrata del c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1387 AGTCTTTTGAATTTCCTCAGTTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGG 1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCTCTCCATTGGCATCTCCATGCCCATTGTCATCATCTTGACCAATGTG 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTTCATCATTTGCAGTGGGTGACATTGCCCTGGCACTGTACTCAGCTCTGTTCTCCTAC 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCTATTATACTGTGTAGACATGAGAGACATCTTGGCCAGTGATGCTGTTGCTGTGACT 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    787 AGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACCCTGGTACAAGATATTTCACCTATGCTAAGTATTGGCACTGATCGCGGTCATC 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCCTTTTCA 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GITGCAGCCATTGTAGACTTGGCCAGGGAGCCTCTACTCATTTTGAGAATTCCTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTTATTGGAATGTATGCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rcadderiedgacaccercaacrarerereadaadaareaagaareere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           crecrederécrecerecarenterentales de la contra del la contra della contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCCTTGCAATATGTATACCATGGCCATTGTCACCATTGGCTATGTGTGAATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITICIGAGCGGCTACTGGGAAATTICTCATTAGCAGTICCGATCTTTGTTGCCCCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1267 CGAGAGGGTCACCTTCCAGAAATCCTCCCATGATCATGTCCGCAAGCACACTCCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAGCTGTTATTGTTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      732 CAGCTCATTAACTACAAGCTTCAGCTACTGGTTCTTTGTGGGGCTTTCTATTGTGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrrecacarcacararrrecaararrraacrecaraarrecacrecacrecarrecacrecarrarce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rérririrégrescercalarecercearrerescerrécricales de la reconstructure de la reconstruction de l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         612 adadaaddccarcrccrcarccarcrccarcarcarcardrasagcgcrrcacacrc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTTCTCTGCTCTTCAATGGTATCATGGCATTGATCTACTTGTGCGTGGAAGACATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 10.2%; Score 229; DB 4; L
Best Local Similarity 53.2%; Pred. No. 5.7e-52;
Matches 484; Conservative 0; Mismatches 425;
                                                                                        EARLIER APPLICATION NUMBER: PCT/US99/17130
EARLIER FILING DATE: 1999-07-29
EARLIER FILING DATE: 1999-07-29
EARLIER FILING DATE: 1998-07-30
EARLIER FILING DATE: 1998-08-05
EARLIER APPLICATION NUMBER: 60/095,486
EARLIER APPLICATION NUMBER: 60/096,319
EARLIER APPLICATION NUMBER: 60/096,319
EARLIER APPLICATION NUMBER: 60/096,454
EARLIER FILING DATE: 1998-08-06
NUMBER OF SEC ID NOS: 376
SOFTWARE: PATCHILI VET. 2.0
FILING DATE: 2000-01-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
CRGANISM: Homo sapiens
US-09-489-847-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

251

ö

```
1595 TCACTCTGACTGGAGTCCCTGCGTATTATCTTTTTATA 1635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          681 frecerricaesecrisecerrifactrecrearcates 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSE: GENOME THERAPEUTICS CORPORATION STREET: 100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: PC
OPERATING SYSTEM: <Unknown>
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/085,598 FILING DATE: 14 May 1998 APPLICATION NUMBER: 60/051571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Waltham
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-107-532A-2089
                                                                                                              1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1355
995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                           ò
                                                                                                                                                                  셤
                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                    1567 CCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTATTATCTC 1626
                  CTGATTTATCTTCGATACAAATGCCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTC 1506
                                                                                                                                   ATCCCAGCTITGTITICCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTATTCGGAC 1566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                  851
                                                                                                                                                                                                                                                                                                                        971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                    852 Trocogariererresecreraceacearerresergementerecacritacagrear
                                                                      caderirareracideragaadeereareareareereereereerearearerageerririe
                                                                                                                                                                                                                                                                                                               912 ACTATCAACTCCCTCATCGCCATTGCCCATCTCAGGCCTGCCCTTTACTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 cccrisscacreracreraterererrerrerasseres de la contra del la contra della contra 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2; Length 1011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-825-781-2

Sequence 2, Application US/08825781

Patent No. 5843727

GENERAL INFORMATION:

APPLICANT: Hillman, Jennifer L.

APPLICANT: Shah, Purvi

TILLE OF INVENTION: HUMAN TUMOR-ASSOCIATED MEMBRANE PROTEIN

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASISEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,781
FILING DATE: Herewith
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 211.4; DB 2
Pred. No. 2.6e-47;
0; Mismatches 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Incyte Pharmaceuticals, Inc
STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: PF-0262 US TELECOMUDICATION INFORMATION: TELEPHONE: 415-855-0555 TELEFAX: 415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Billings, Lucy J. REGISTRATION NUMBER: 36,749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 1011 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                         TTTATTATA 1635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                                                                                                                                                                                             972 ATCATCAGA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LIBRARY: PANCTUT02
CLONE: 2236771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 31/7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
TOPOLOGY: line
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Pa
STATE: CA
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             395;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-825-781-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 395
                                                                                                                                   1507
                  1447
                                                                                                                                                                                                                                                                                                                                                                         1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          935
                                                                         792
                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                  ò
                                                                      셤
                                                                                                                                8
                                                                                                                                                                                                                                                        ò
```

Sequence 2089, Application US/09107532A

Patent No. 6583275

GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
ENTEROCOCCUS FABCIUM FOR DIAGNOSTICS AND THERAPEUTICS
NUMBER OF SEQUENCES: 7310 TIGICACCATIGGCIAIGIGCIGACAAAIGIGGCCIACITIACGACCAITAAIGCIGAGG 1114 1115 AGCIGCITICAAAIGCAGIGGCAGIGACCITITICIGAGCGGCIACIGGGAAAITICT 1174 1294 1354 1475 ATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGCC 1534 CTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCCA 1054 1415 GGTGGCTTTTTATTGGGCTGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCAG 1474 1535 TCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTCA 1594 440 CAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTGAATTTCCTCAGTTTTGCCA 1414 620 81 Creaadaarcaadaarccreaagaaccreccccrccarreccarciccareccare 261 ACTGGATAATICCACTGTCAGTTGCATTATCCTGTTTTGGTGGCCTCAATGCCTCCATTG 320 TGGCTGCTTCTAGGCTTTTTTGTGGGCTCAAGAGAAAGGCCATCTCCCTGATGCCATCT 380 621 rchrcciderecrerrceachriaeagrahaenarenareaecencercerceregen 680 1175 CATTAGCAGTICCGATCTTTGTTGCCCTCCTGCTTTGGCTCCATGAACGGTGGTGT 1295 CCATGATTCATGTCCGCAAGCACACTCTCTACCAGCTGTTATTGTTTTGCACCCTTTGA 141 Trórcaccarcarcrararcricaccaricrédectrarraracrecrasacargasas 201 ACATCTTGGCCAGTGATGCTGTTGGTGACTTTTGCAGATCAGATATTTGGAATATTTA 1235 TIGCIGICICCAGGITATICTATGTTGCGTCTCGAGAGGGTCACCTICCAGAAAICCICT 381 GCATGATCCATGTTGAGGGGTTCACAGTGCCTTCTCTGCTCTTCAATGGTATCATGG 441 CATTGATCTACTTGTGCGTGGAAGACATCTTCCAGCTCATTAACTACTACAGCTTCAGCT 501 ACTGGTICTTTGTGGGGCTTTCTATTGTGGGTCAGCTTTATCTGCGCTGGAAGGAGCCTG 561 Arceaccricarcecricaaccricaeceirrirerrecearriererereceirerecea

ø

```
987 CTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATC 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTC-012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 347, Application US/09107532A
Patent No. 6583275
GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm
IITLE OF INVENTION:
ENTEROCOCCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 02354
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: PC
OPERATING SYSTEM: <Unknown>
SOFTWARE: ASCII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (781)893-827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Waltham
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
US-09-107-532A-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1389'
                                                                                                                                                                                                                                                                                                                                                               1284
                                                                                                                                                                                                                                                                                                                                                                                                                                     1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1458
                                     연
                                                                            õ
                                                                                                         dd
                                                                                                                                               ò
                                                                                                                                                                            g
                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ω
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       867 AATTAAAGGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTAC 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            349 AGCCTTGGGAGCGGCTTGCTAGCAACGATGTTCGCATACGACGCTTGGATACACGTAGG 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGCAGCGTGGCCATGTCTCTGACCATCTGGACGGTGTGTGGGGGTCCTGTCACTATTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    729 TACGCTTGTCTGCAAGCTTATTCCTTTGTGTGATCGTCATTTTCGGTTTGTTCCGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     327 AGGAAGAGAAAAGTGCAGCTGAAGAGAAAGTCACTTTACTGAGGGGAGTCTCCATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            387 CATTGGCACCATCATTGGAGCAGGAATCTTCATCTCTCCTAAGGGCGTGCTCCAGAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATCGAACGGATTTACGGAAATACAGCACTTTTTTATTGGGCTGGGCCCAAGTCGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATTTTCCAGCAAATGTAGCAGCCTTGTCGATCATTTTCGGTACACAGTTCGTCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTITITITITATICAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTIGGICTITCCCAGTCAAT-----GATTGTTCCCGTAGCTGTTACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTATCGATCCTGTTGATCAATTTTTAGGTTCTAAAGCTGGAGGGGGCTTTTTCAGTCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   807 CITAACCITITGCAAGCICACAGCAATICIGAIAATIATAGICCCIGGAGTIAIGCAGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261 AGTAAAATAGAAATGAATTAAAACGTACGATGGGATTTTTTTACTGCTTTTATCGACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321 TATGGGCACAGTGATCGGTGCAGGGGTATTTTTTAAAGCCGCAAGCGTAGCAGAGTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATITIGGAAGTCTTIGGICCATTACCAGCTTTIGTACGAGTCTGGGTGGAACTCCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            747 AACTGTAGTGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           789 AGAAGGAGTAGACTTCCAACTGTTTCCGATCCAAGCAGGAGAAATCTTTCATTTTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 4.2%; Score 94.2; DB 4; Length 1578; Local Similarity 44.5%; Pred. No. 1.3e-15; nes 528; Conservative 0; Mismatches 638; Indels 21
                                                  REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
RELECOMUNICATION INFORMATION:
TELEPRONE: (781)893-5007
TELEPRONE: (781)893-8277
INFORMATION FOR SEQ ID NO: 2089:
SEQUENCE CHARACTERISTICS:
LENGTH: 1578 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc feature
;
; SEQUENCE DESCRIPTION: SEQ ID NO: 2089:
US-09-107-532A-2089
                                       NAME: Ariniello, Pamela Deneke
                                                                                                                                                                                                                                                                                                                        ORGANISM: Enterococcus faecium
FILING DATE: July 2, 1997
                                                                                                                                                                                                                                TOPOLOGY: circular
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               699
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \overset{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

```
and David Bush
AND AMINO ACID SEQUENCES RELATING TO
FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1388
909 AAATATTTCGGGAGAATTGAAAAAGCCGGCGAAAGATTTGCCAAAAGCAATTTCTTTAGG
                                                                            1047 CAIGGCCATTGTCACCATTGGCTATGTGTGACAAATGTGGCCTACTTTACGACCATTAA
                                                                                                                                                                                                                                 1107 TGCTGAGGAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGG
                                                                                                                                                                                                                                                                                                          1029 TATCGACGGAGTCGCAGGAAACAGCAATGCGGCAAGTGACGTTGCAAAAATGATTTTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1089 ceccrircerecaaacacrecreacracriceraricariricrerriarecaaccarca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1149 IGCINIACCCTTACTGGAAIGCGICTCCCTIAIGTIAIGCAAAAGAAAACAACCIGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----AGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1209 TITTAGCAAGCTCTTTGCTAAACTTCATGATAAAACTAAAGTTCCTGTAGCCGCAGGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITCCICAGITITGCCAGGIGGCITITIATIGGGCIGGCAGIIGCIGGGCTGATITAICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        969 AATCATCGGAATCATGATCGTTTATTTAGTAAATGCGGTGTTCTTAAGAACCGCATC
                                                                                                                                                                                                                                                                                                                                                                                       1167 AAATTTCTCATTAGCAGTTCCGATCTTTGTTGCC---CTCTCCTGCTTTGGCTCCATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1224 CGGTGGTGTTTGCTGTCTCCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1269 CTTAGAĞCTAGTCATCGCTATTGGCATGATGATGATCGGTGGTTTTTGATACACTAACGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rceraaaaaaaacerearrierriceaecaracaaerreearer 1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 7310
CORRESPONDENCE ADDRESSE:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
```

```
1349 CTTTGACAAT-----GATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCC 1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1403 TCAGITITGCCAGGTGGCTTTTTATTGGCTGGCAGTTGCTGGGCTGATTTATCTTCGAT 1462
            1112 AGGAGCT---GCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAA 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1106 TGATTTTTGTGATGTGGCTATTCACTTTACTGATTTGTATCGGTGTCTCTATTTTAACAA 1165
                                                                                                                        1169 ATTICTCATTAGCAGTICCGAICTTGTTGCCCCTCTCCTGCTTTGGCTCCATGAACGGTG
                                                                                                                                                                                                                                                                                                                                                          1289 TCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACC
                                                                                                                                                                                                                                                                                                                                                                                                             986 GTAAACAGCTGACAATCTTTCAAAGAAGTTTACGGTTCCTTATGTCCCTGCGGTTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1046 AGTTAGCAGTAGCTTGTATTATGATGAGCCTTGGTTCTTTCGACTTTTTAACACACATGT
                                                               806 ATCATCTTGCCGGTAATTTGAATGCAGCTTCTGAAGCATCAGACGTCATTTTTGGAGGAA
                                                                                                                                                                              866 rcgcrgdaaagcrgcrccrarraggarcrrgarcrcggraracgcrgcarrdaacgcrr
                                                                                                                                                                                                                                       1229 GIGIGITIGCIGICICCAGGITAITCTAIGTIGCGICCAGAGGGICACCIICCAGAAA
                                                                                                                                                                                                                                                                                                 926 ATACACTARCTGGGATCCGCGTGCCTTATGCGATGCCTTTAGAAGACGATCTACCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1463 ACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1166 AAAAAGCGCCGGAATTGCCACGTCCATATCAAGTACCACTTT 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14, Application US/08232463
Patent No. 5670367
CENERAL INFORMATION:
APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29,768
3R: 30472/114 IMMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 1800 Diagonal Road, Suite 500 CITY: Alexandria STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
APPLICATION NUMBER: EP 91 114 300.6
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 304
TELECOMMUNICATION INPORMATION:
TELEPHONE: (703)836-9300
TELEFAX: (703)683-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 14.
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 22313-0299
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-232-463-14
                                                                                                                        à
                                                                                                                                                                              g
                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                             pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTG 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    992 ITACTGAAGAAGTAGAAAAACCCTGAAAAAACCATTCCCCTTGCAATATGTATATCCATGG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386 CGAACTTATTACAATTATCTACCGATTATCTTTTGTTGATTGCAGGATCACGGCTGTTT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGCACGGGAAATGAAACGCCCGGAAAAAGATTTGCCTAAAGCAATTATTCTTGGTTTGA 745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    332 GAGAGAAAGTGCAGCTGAAGAGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTG 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACCGTGATCGGTGTGTGTTGTTGAAACTGCTGTTACTGCTAGTACTCGT 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGTGGGCATGTCTCTGACCATCTGGACGGTGTGTGGGGGTCCTGTCACTATTTGGAGCTT 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATT 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACAGTGGCTGAATTAGCTACAGCAATCCCGGAAACTGGTGGAGCTGTAAAATATATTG 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCCTGCAGCTACTGCTGTATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTT 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tricingcrantaricaritaricaritaricaritaris------caacacaarisa 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTG 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAA 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTGACAGGGTTGAATTTGTTAGGGACAAAAGTCGGTGCTTCTGTACAATCAGTGACGT 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTTTTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTA 871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGATIGITAAATTAACCAATIGCTGTGATTGTCATATGGGGATTATTGACCCCAGGAC 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGTCAAACGCAGAACTTTTAAAGACGCCTTTTTCAGGAAGAGATTCAAGTATTACGCGGT 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAGCAGTGCGTTGTTAGCAACGTTGTTTGCTTATGACGGCTGGTTAGGTGTCGCGAA 685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCACCATCATTGGAGCAGGAATCTTCATCTCTCCTAAGGGCGTGCTCCAGAACACGGGCA 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATAC 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATGAAAGCCAAACTAAAACGAGAAATCAATCTGTTTGGCGCATTAGCTACCGTTATGG 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTACAAGTTTGACATTGCTAGCTTGGCTTTTGGGTGGTTTCTTAACGATCTGTGCTGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGAACTGTCCAGTTATTTCCAATCGAAGCTGGAAAGATGTTACTTTTGTCGAAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           278 AAGCTGCGTATGGAAATTGCCCAGCTTTTTATTAGGATGGGCGCAAAGCTTGATTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
4.0%; Score 89.2; DB 4; Length 12
Best Local Similarity 44.2%; Pred. No. 2.7e-14;
Matches 523; Conservative 0; Mismatches 638; Indels
                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
LOCATION: (B) LOCATION 1...1254
SEQUENCE DESCRIPTION: SEQ ID NO: 3477
US-09-107-532A-347
                                                                                                                                                                                                                                 ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Enterococcus faecium
                           SEQUENCE CHARACTERISTICS:
LENGTH: 1254 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                       TOPOLOGY: circular
MOLECULE TYPE: DNA (genomic)
INFORMATION FOR SEQ ID NO: 347:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            446
```

a

 $\delta$ 

ö

à

ò

ò

ò

ò

음 ò 셤

₽

ω

Page

```
0; Mismatches
                                                                                                                                       TITLE OF INVENTION: NOVEL MOLECULES OF TANGO TITLE OF INVENTION: NOVEL MOLECULES OF TANGO TITLE OF INVENTION: NOVEL MOLECULES OF TANGO TITLE OF INVENTION: AND USES THEREOF TILE REPERENCE: 09404/052001
CURRENT FILING DATE: 1998-08-03
EARLIER APPLICATION NUMBER: US 60/091,650
EARLIER FILING DATE: 1998-07-02
EARLIER FILING DATE: 1997-08-04
                                                                                 Sequence 16, Application US/09128155
Patent No. 6117654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature

1 LOCATION: (1)...(152331)

2 CTHER INFORMATION: n = A,T,C or G

US-09-128-155-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: (1)...(148567)
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 73.2
Matches 82; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 16
LENGTH: 152331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-801-876B-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 148567
                                                                  US-09-128-155-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-801-876B-3
                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE:
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DP
DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                  1184 TTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTGTTTGCTGTCT 1243
                                                                                                                                                                                                                                                             1244 CCAGGTTATTCTATGTTGCGTCTCGAGGGTCACCTTCCAGAAATCCTCTCCATGATTC 1303
                                                                                                                                                                                                                                                                                                                                          1304 AIGICCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTTGCACCCTTTGACAATGATAA 1363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1424 TTATIGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATC 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1484 GICCTTICAAGGIGCCACIGIICAICCAGCTITGIITICCITCACAIGCCTCTTCAIGG 1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó
                                                                                                                                                                                                                                                                                                                                                                                                                       1364 IGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTT 1423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENGRAL INFORMATION:

BENERAL INFORMATION:

TITLE OF INVENTION:

TITLE OF INVENTION:

ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, NUCLEIC

TITLE OF INVENTION:

THERROF

FILLS REFERENCE:

CURRENT APPLICATION NUMBER: US/09/800,960

CURRENT FILING DATE:

SOUTHWARE: FASUSEQ for Windows Version 4.0
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                             o'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 2.3%; Score 51.6; DB 4; Length 62804;
l Similarity 70.4%; Pred. No. 0.0024;
69; Conservative 0; Mismatches 29; Indels 0;
                                                                                                 h 3.0%; Score 67.4; DB 1; Length 7218; Similarity 2.1%; Pred. No. 4.7e-08; 8; Conservative 235; Mismatches 136; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43539 AAGCAATCTTTAAGATATCATTATAGGCCAGGCGTGG 43502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83 AAGAAAAAGAGAGAGAGAAATTCCAGGCCAATTGTGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1544 TTGCCCTTTCCCTCTATTC 1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1420 YYYYYYYYYYYYYGTAC 1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ), LOCATION: (1)....(62804)

, OTHER INFORMATION: n = A,T,C or G
US-09-800-960-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/09800960
Patent No. 6387677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
                                   CLONE: pTZgpt-F1s
US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 69; Conserva
TOPOLOGY: linear
                                                                                                 Query Match
Best Local Similarity
                    IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 3
LENGTH: 62804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-800-960-3/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                             쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
```

```
151204 GGAGGITGCAGTGAGCAGAGATCGTGCCACTGCAGCCTGGGTGACAGGGAGACTC 151263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/09801876B
Patent No. 6492155
GENERAL INFORMATION:
APPLICANT: YE, Jane et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REPERENCE: CLOO1160
CURRENT APPLICATION NUMBER: US/09/801,876B
CURRENT FILING DATE: 2001-03-09
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 79560 deaddirideadricaedaricaeaceaereaeceereagaaacaeacaeacae 79501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGAGGTTGAAGTGAGCAGAGATCATG------CCAGCCTGGGTGACAGTGAGTCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAGGTTGAAGTGAGCAGAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
OF TANGO-77 RELATED PROTEIN FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 148567;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 152331,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 2.2%; Score 48.6; DB 4;
Best Local Similarity 53.1%; Pred. No. 0.023;
Matches 129; Conservative 0; Mismatches 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.2%; Score 50; DB 3; 73.2%; Pred. No. 0.0098;
```

g

ö

0; Gaps

82

g

à g ò

셤  $\delta$ 

```
APPLICANT: Inselburg, J. et al.

TITLE OF INVENTION: GENE ENCODING PROTEIN ANTIGENS OF PLASMODIUM FALCIPARUM
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: JII-002CNCP
CURRENT APPLICATION NUMBER: US/08/213,419B
CURRENT FILING DATE: 1994-03-14
PRIOR APPLICATION NUMBER: US 07/870,506
PRIOR FILING DATE: 1992-04-17
                                                                                                     GENERAL INPORMATION:
APPLICANT: WESTER, Marion et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REPERENCE: CLOOLI161
CURRENT APPLICATION NUMBER: US/09/803,671B
CURRENT PILING DATE: 2001-03-12
NUMBER OF SEQ ID NOS: 7
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1788 ATTITIACTICATITITCIGAAAGICTAGAGAATTACAACTITGGIGATAAAAAAAAAGAG 1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1848 TCAGTTATTTTTTATATATTTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTA 1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2290 ATATTTATTTTTTTTTTTTTTTTGGACAATCTAATTTAATTTTAAATTAAAAAATTT 2231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1908 TAACTCTATGTAGTTATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATT 1963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23 CAIGCCAGCCIGGGIGACAGIGAGACICTGTCTCAAACAGAATTAAGGAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2350 ATGITTGATTTTATTTTTTTTTATATATATATATGTTATATAT
                                                                                                                                                                                        83 AAGAAAAAGAGAGAGGAAATTCCAGGCCAATTGTGGCATAGATTTTATCATA 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 2.0%; Score 44.8; DB 4; Length 6124; Best Local Similarity 53.4%; Pred. No. 0.054; Matches 94; Conservative 0; Mismatches 82; Indels 0
        42; Indels
        0; Mismatches
                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/08213419B Patent No. 6333406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/09803671B Patent No. 6582946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.0
     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: CCS
LOCATION: (2598).. (3404)
NAME/KEY: CDS
LOCATION: (3580).. (3720)
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: CDS
LOCATION: (2407)..(2439)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LOCATION: (3850)..(5835)
US-08-213-419B-3
                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                           US-08-213-419B-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
US-09-803-671B-3/c
72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 3
LENGTH: 6124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE
  Matches
                                                                                                  셤
                                                                                                                                                        ò
                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: YAN, Chunhua et al.
APPLICANT: YAN, Chunhua et al.
TITLE OF INVENTION: ISOLATED HUMAN DEHYDROGENASE PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING THESE HUMAN DEHYDROGENASE
TITLE OF INVENTION: PROTEINS, AND USES THEREOF
TITLE OF INVENTION: PROTEINS, AND USES THEREOF
CURRENT APPLICATION NUMBER: US/09/876,216
CURRENT APPLICATION NUMBER: US/09/876,216
CURRENT FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 14485
                                                                  79440 GTTTGCTGTAGTATTTTCACAGTCTGGACTTTGCCGATTGCCTTCATGTCACGTCAATCT 79381
                                                                                                                                                                                                                                                                        79380 ATACATTCCACAATTCTTTGTAAAAATTGGTGGTTAGATCTAGAGGCTTGTTC 79321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Wei, Ming-Hui et al.
TITLE OF INVENTION: ASID HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ASID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLOO0892
CURRENT APPLICATION NUMBER: US/09/691,861A
CURRENT FILING DATE: 2000-10-18
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cacrocadocradadeceadadecendenteres asses
                     AGAATTAAGGAAAAAAAAAAAAAAAAAAAAGAGAGAGGAAATTCCAGGCC----AAAT 115
                                                                                                                        116 TGTGGCATAGATTTTATCATATTCTGGATTTTTTGGATTCTTTTGTTTTTCTCATCACTGG 175
                                                                                                                                                                                                                      176 ATTCAGGAAAGCCTGTTGTGTCCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTA 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 46.8; DB 4; Length 14485;
Pred. No. 0.023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 9862;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.1%; Score 47.4; DB 4; Length 9 70.8%; Pred. No. 0.013; tive 0; Mismatches 26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3995 AAGAAAAAAAACAGCTAACAGTGTTGGC 3967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      83 AAGAAAAAGAGAGAGAGAAATTCCAGGC 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/09691861A
Patent No. 6482935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/09876216
Patent No. 6544764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                           79320 AAG 79318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                              236 ACG 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Human
US-09-876-216-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 12
US-09-691-861A-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-876-216-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-691-861A-3
                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
```

Matches

ð 셤 δ

;

```
Query Match 2.0%; Score 44.2; DB 4; Length 64467;
Best Local Similarity 71.6%; Pred. No. 0.24;
Matches 58; Conservative 0; Mismatches 23; Indels 0; Gaps
                                                                                                                                                                                                                                                                                        20805 GAAGAGAGAGAGAAAAAA 20785
; LENGTH: 64467
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: misc_feature
; COATION: (1)...(64467)
; CTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                   83 AAGAAAAGAGAGAGGAAA 103
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                               qq
```

ö

Search completed: October 30, 2003, 07:16:01 Job time : 124 secs

```
RESULT 1
US-09-738-973-440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 440
LENGTH: 2239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                331.6
319.6
315.6
315.6
315.6
315.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (without alignments)
5783.111 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 440,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          441,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 78, Sequence 33, Sequence 33, Sequence 52, Sequence 34, Sequence 34, Sequence 53,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
Sequence
Sequence
                                                                                                                                                                    Search time 1053 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-163-866-33
US-10-163-866-52
US-10-163-866-34
US-10-163-866-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-163-866-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1811591 seqs, 1359896290 residues
                                                                                                                                                                          ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                            OM nucleic - nucleic search, using sw model
                                                                                                                                                                 October 30, 2003, 04:43:10
                                                                                                                                                                                                                                                                                                                                                                                        IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                           US-09-667-170A-440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seg length: 0
seg length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
22239
                          Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1000.0
1000.0
1000.0
993.0
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
992.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902.9
902
                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22339
22339
22339
20802339
2080.8
2080.8
19000.8
1715
1715
174715
1454.4
1454.4
1454.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
1654.4
                                                                                                                                                                                                                                                                                                         Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database
                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Result
No.
```

```
24, Appl
10, Appl
11, Appl
11, Appl
12, Appl
12, Appl
13, Appl
11, Appl
11,
                                                                                                                                                                                                                                                                                                                                                                                                                                          , Appl
Appli
Appli
, Appl
, Appl
                                                                                Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                             Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                         Sequence
Sequence
                                                                                                                                                        Sequence
                                                               Sequence
                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
US-10-051-835-24

US-10-163-866-32

US-10-163-866-9

US-10-163-866-9

US-10-163-866-9

US-10-163-866-12

US-10-163-866-12

US-10-163-866-12

US-10-163-866-11

US-10-163-866-11

US-10-163-866-11

US-10-163-866-12

US-10-163-866-13

US-10-163-866-14

US-10-163-866-14

US-10-163-866-15

US-10-163-866-15

US-10-163-866-15

US-10-163-866-15

US-10-163-866-15

US-10-163-866-15

US-10-163-866-15

US-10-163-866-15

US-10-163-866-13

US-10-163-866-13
   3717
4239
1716
2529
1595
1918
1918
1918
```

## ALIGNMENTS

```
1 GGAGGTTGAAGTGAGCAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCTCTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGAGGITGAAGIGAGCAGAGATCAIGCCAGCCIGGGIGACAGIGAGAGTCIGICICAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                         APPLICANT: Neder, Stoven C.
APPLICANT: Lodes, Michael J.
APPLICANT: Lodes, Michael J.
APPLICANT: Flidg, Steven P.
APPLICANT: Algate, Paul A.
APPLICANT: Algate, Paul A.
APPLICANT: Marker, Garcist, Heather
APPLICANT: Benson, Darin R.
APPLICANT: Benson, Darin R.
APPLICANT: Ralos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.475C9
CURRENT PLINIG DATE: 2000-12-14
NUMBER OF SEQ ID NOS: 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10; Length 2239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 2239;
100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version 3.0
Sequence 440, Application US/09738973
Patent No. US20020110563A1
GENERAL INFORMATION:
                                                                             Reed, Steven G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.
Matches 2239; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-738-973-440
```

ô

us-09-667-170a-440.rnpb

Page 2

8 8 8 8

		1501 CTGTTCATCCCAGCTTTGTTTTCCTTCACATGCTTCATGGTTGCCCTTTCCCTCTAT 1560 1501 CTGTTCATCCCAGCTTTGTTTTCCTTCACATGCTTGCCTTTTCCCTCTAT 1560 1501 CTGTTCATCCCAGCTTTGTTTTCCTTCACATCCTTCATGGTTGCCTTTTCCCTCTAT 1560 1561 TCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTCGACTCCTGCGTAT 1620 1561 TCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTAT 1620	1621 TATCTCTTATTATAGGACAAGAAACCCAGGTGGTTTAGAATATGTCAGAGAAATA 1680 1621 TAICTCTTATTATTATGGACAAGAACCCAGGTGGTTTAGAATAATGTCAGAGAAATA 1680 1621 ACCAGAACATTATATATAGGACAAGAAGAACATGAGAAATA 1680 1681 ACCAGAACATTACAAATAATACTGGAAGTTGTTACCAGAAGAAGAAGAAGAAGAAGAAGAAGAACTTATAGAATAATACTGGAAGTTGTACCACAAGAAGAAGAAGAAGAAGAAGAAGAACATTACAAATAATACTGGAAGTTATACCACAAGAAGAAGAAGAAGAAGAAGAACATTACAAATAATACTGGAAGTTATACCACAAGAAGAAGAAGAAGAAGAACATTACAATAATACTAGAAGTTACCACAAGAAGAAGAAGAAGAAGAACATTACAAATAATACTAGAAGTTACACAAGAAGAAGAAGAAGAAGAACATTACAATAATACTAGAAGTAAGT		TTTCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTA 1	1881 IICAIAIRITITAGCAIATICGAACTAATITCTAAGAAATITAGTTATAACTCTATGTAG 1920 1921 TTATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC 1980 1921 TTATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC 1980				2161 AAAAAAGCATACATCATGATTATGGCAAAGAGAGAGAGAG	2221 TATTAAAAAAAAAAAA 2239 
8 6 8 6 8 6 8	8 8 8 8	8	\$ 9 \$ 93 \$ 10 \$ 10 \$ 10 \$ 10 \$ 10 \$ 10 \$ 10 \$ 10	oy Op	o de o d	a oo a	SP GS	ζς qg	රු දු	ර් යි	à d
						1800	-				-
	GCCTTTCAGGAAGACGCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGGAAAGTC 360	TCTCCTAAGGGCGTGCTCCAGAACACGGCGTGGGCATGTCTCTGTGACCATCTGGACG 480		GCATTIGGACGCTACATCTGGAACCATTITTATTCAATGTGAAATCCCTGAACTTGCG 720 	ATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTC 780	AGCTGGAGCGCCGGATCCAGATTTCTTAACTTTTGCAAGCTCACAGCAATTCTGATA 840 ATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCGAAACTTTAAAGACGC 900	TTTTCAGGAAGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTAT 960 	GCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAA 1020 	ACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACA 1080	AATGIGGCCTACTITACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCA 1140 	

m

720 720 780 780 840 840 900 900 960 960

```
1741 GGACTTGAGATCTTGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCAT 1800
                                                                                                                                                                                                                                                                                                                        1021 ACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACA
1021 ACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACA
GCATTTGGACGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCG
               721 ATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTC
                                                                                                       781 AGCTGGAGGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATA
                                                                                                                         ATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCC
                                                                                                                                                                            1081 AATGIGGCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGA
                                                    ATCAAGCTCATTACAGCTGTGGGGATAACTGTGGTGGTGCTCCTAAATAGCATGAGTGTC
                                                                                                                                                                                                                  TTTTCAGGAAGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTTATTATGGAATGTAT
                                                                                                                                                                                                                                                                      GCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCC
                                                                                                                                                                                                                                                                                                                                                                                AATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTTTTCAAATGCAGTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CICICCIECTITIGECICCAIGAACGGIGGIGITITICCICCAGGITATICIAHGIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTGGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CIGITCAICCCAGCITIGITITICCITICACATGCCTCTTCAIGGITGCCCTTTCCCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141 GreactrificTeaggegeracteseaarriferarraseagricesarctristreec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGAAACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTTATTGGGCTGGCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCTTTCCCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1681 ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCGACAGTCTTTTGAATTTCCTCAGTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGGGCTGATTTATCTTCGATACAAATGCCCCAGATATGCATCGTCCTTTCAAGGTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCGGACCCATTIAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561 TCGGACCCATTAGTACAGGGATTGGCTTCGTCATCACTCTGACTCGGAGTCCCTGCGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATCTCTTTTATTATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
 661
                                                                                                                                                              841
                                                                                                                                                                                                                  106
                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                 196
                                                                                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1621
                   g
                                                 \delta
                                                                         gg
                                                                                                       ò
                                                                                                                               임
                                                                                                                                                            à
                                                                                                                                                                                    a
                                                                                                                                                                                                               à
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                        61 AGAATTAAGGAAAAAAGAAAGAAAAGAAAAGAGAGAGAAAATTCCAGGCCAATTGTGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGAC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTTTTCAGGAAGAGGCCTTTTCAGGAAGAGAGAAAGTGCAGCTGAAGAGGAAAGTC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTG 660
                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                            CATAGATITITATCATATICTGGATITITITGGATTCTTTTGTTTTCTCATCACTGGATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAAAGCCTGTTGTGTCCCACATCTCCAAAGGAGGTTACCTGCAGGAAATGTTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAGGTTGAAGTGAGCAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATAGATITITATCATATTCTGGATTTTTTTGGATTCTTTTGTTTTCTCATCACCAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTITIACTGAGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCCTAAAGGGCGTGCTCCAGAACACGGGCAAGGTGGGGCATGTCTGAACGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GIGIGIGGGGICCIGICACIAITIGGAGCITIGICITAIGCIGAATIGGGAACAACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGTGTGGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGGAACAACTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAAAICTGGAGGCATTACACATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTT
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                    DB 10; Length 2239
                                                                                                                                                                         CANCER
                                       Sequence 440, Application US/0954133
Publication No. US20020183499A1
GENERAL INPORMATION:
APPLICANT: LOGES, Michael J.
APPLICANT: Mohamath, Raodoh
APPLICANT: Henderson, Robert A.
APPLICANT: Benson, Darin R.
APPLICANT: Benson, Darin R.
APPLICANT: Benson, Darin R.
TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANG FILE REFERENCE: 210121-475C10
CURRENT FILING DATE: 2001-05-11
NUMBER OF SEQ ID NOS: 735
SOFWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                100.0%; Score 2239; DB 10; Length
100.0%; Pred. No. 0;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 2239; Conservative
                                                                                                                                                                                                                                                                         TYPE: DNA; ORGANISM: Homo sapiens
US-09-854-133-440
                   RESULT 2
US-09-854-133-440
                                                                                                                                                                                                                                                 SEQ ID NO 440
LENGTH: 2239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 109
                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DP
```

1080 1140 1200

1260 1260 1320 1380 1380 1440

1560 1500

1680

1620

1740 1680

8

1020 1080

121 CATAGATTTTATCATATTCTGGATTTTTTGGATTCTTTTGTTTTCTCATCACTGGATTCA 180  181 GGAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGG 240  181 GGAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGG 240	GAGCCACCTGGGCAGGACTTTTCAGGAAGAGAC 30	301 GCCTTTTCAGGAAGGCCTTTTCAGGAAGAAGAAAGTGCAGCTGAAGAAAGTC 360 	361 ACTITACIGAGGGAGTCTCCAITATCAITGGCACCAICAITGGAGCAGGAATCTICAIC 420 	421 TCTCCTAAGGGGGGGGAGCGAAGACACGGGCAAGGGGCATGTCTGACCATCTGGACG 480	481 GIGIGIGGGGICCIGICAGIATIGGAGCITIGICTIAIGCIGAATIGGAACAACIAIA 540 	541 AAGAAATCTGGAGGTCATTACACATATATTTGGAAGTCTTTGGTCCATTACCAGCTTTT 600	601 GTACGAGTCGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTG 660 	661 GCATTIGGACGCTACAITCIGGAACCAITTITTAITCAAIGIGAAAHCCCTGAACTIGCG 720 	721 ATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGGTGT 780 	781 AGCTGGAGCGCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATA 840 	841 ATTATAGTCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCC 900 	901 ITITCAGGAAGAGITCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTAT 960 	961 GCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAA 1020 	1021 ACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGTGTG	1081 AATGTGGCCTACTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCA 1140	1141 GTGACCTTTTCTGAGGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCC 1200	1201 CICICCIGCITIGGCICCAIGAACGGIGGIGIGITIGCIGICCCCAGGITAITCIAIGTI 1260 
96 A3	Q7 O2	QY Db	Qy	S G	S G	S S	Sy da	₹ qq	යි හි	& B	% A	y Q	Q <sub>V</sub>	VQ QD	ζ, dg	Qy Db	OY DP
	1861	1921 TTATAGAAAGTGAATATGGATATTCTATGAGTGCACAATTCTTGAGTCTCTGATACC 1 1921 TTATAGAAAGTGAATATGGAGTTATTCTATGAGTCCCACAATTCTTGAGTCTCTGATACT	5 50	0 0		22		RESULT 3 US-10-144-649A-440	; Sequence 440, Application US/10144649A ; Publication No. US20030118599A1 ; GENERAL INFORMATION; ; APPLICANT: Lodes, Michael J.	/ APPLICANT: Wang, Tongtong // APPLICANT: Fan, Lignn // APPLICANT: Algate, Paul A. // APPLICANT: Moweill, Patricia D.	; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR; ITLLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER; FILE REFERENCE: 210121.475C11 ; CURRENT APPLICATION NUMBER: US/10/144,649A		; ILENGTH: 2239 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-144-649A-440	Query Match 100.0%; Score 2239; DB 14; Length 2239; Best Local Similarity 100.0%; Pred. No. 0; Matches 2239; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	AGTGAGCAGAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAAC 60	rGTGG	18

```
Publication No. US20030118599A1
                                                                                                                                                                                                                                                                                                                           213
                                                                                                                                                                                                                                                 63
                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                  \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                      \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                            1380
                                                                                                     1440
                                                                                                                      1500
        1320
                                                                                                                                                            1560
                                                                                                                                                                                                 1620
                                                                                                                                 TATCTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA 1680
                                                                                                                                                                                                                                              ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAAT 1740
                                                                                                                                                                                                                                                                                                                                                                                       TTCATATATTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAG 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                      2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2160
                                                                                                                                                                                                                                                                                                                                                    TTTCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTA 1860
                                                                                                                                                                                                                                                                                                                                                                                                  1980
     GCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACT
                                                                                                                                                                     CTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTTAT
                CCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTGGAGAC
                                                                             CTCGACAGTCTTTTGAATTTCCTCAGTTTTTGCCAGGTGGCTTTTTTATTGGGCTGGCAGTT
                                                                                                                   GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCA
                                                                                                                                                                                              TCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTAT
                                                         CTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTAT
                                                                                                                                                                                                                                                                                    GGACTTGAGATCTTGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGIDAAGAIGGITTIACACACTACAGAIGICIAIACIGIAAAAGIGITTICAAIICIG
                                                                                                                                                                                                                                                                                                                              GGACTIGAGATCTIGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                            TTATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tricrgaaagreragaarracaacrirgergaraaacaaaaggagreagriarrira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACCTATTGGGGTTAGGAGAAAAGACTAGACAATTACTATGTGGTCATTCTCTACAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGTTAGCACGGCAAAGAACCTTCAAATTGAAGACTGAGATTTTTCTGTATATATGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTAAAAAAAAAAAAA
                       1261
      1261
                                         1321
                                                           1321
                                                                               1381
                                                                                                  1381
                                                                                                                    1441
                                                                                                                                       1441
                                                                                                                                                        1501
                                                                                                                                                                           1501
                                                                                                                                                                                              1561
                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                                                                                                               1741
                                                                                                                                                                                                                                                                                                                                                                     1801
                                                                                                                                                                                                                                                                                                                                                                                                                                              1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2161
                                                                                                                                                                                                                                                                                                             1741
                                                                                                                                                                                                                                                                                                                                                  1801
                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                                          1861
                                                                                                                                                                                                                                                                                                                                                                                                                             1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2221
                                                                                                                                                                                                                                                                                           1681
                    g
                                        ö
                                                      g
                                                                              \delta
                                                                                                g
                                                                                                                ò
                                                                                                                                   d
                                                                                                                                                       8
                                                                                                                                                                     g
                                                                                                                                                                                            ò
                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                                                                                                                                                                    P
                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                            DP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

RESULT 4 US-10-144-649A-740 ; Sequence 740, Application US/10144649A

٠٠ ۲٠٠ 152 120 212 CATAGATITTATCATAITCTGGATTTTTGGATTCTTTTGTTTTCTCATCACTGGATTCA 180 272 240 332 AGGCTGCCTTCCCTGGGCAACAAGGGCCACCTGGGCAGGACGCCTTTTCAGGAAGAAC 300 360 420 458 480 518 540 009 638 999 698 720 721 ATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTC 780 GGAGGTTGAAGTGAGCAGAGATGTGTGTGTGTGAGTGAGAGTGAGAGTGAGAGTGAGAG CATAGATTTTATCATATTCTGGATTTTTTGGATTCTTTTGTTTTTCTCATCACAGATTCA 61 AGPATTAAGGAAAAAAAAAAAAAAAAAAAAGAGAGAGAAAATTCCAGGCCAATTGTGG GGAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGG 273 GGAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGG ACTITACTGAGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATC 1 GGAGGTTGAAGTGAGCAGAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAAC 301 GCCTTTTCAGGAAGAGGCCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGGAAAGTC ------GAGAAGTGCAGCTGAAGTGCAGCTC 361 ACTITACTGAGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATC TCTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTGACCATCTGGACG GTGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATA 519 GTGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACAACTATA 541 AAGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTT 639 GTACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTG GCATTTGGACGCTACATTCTGGAACCATTTTTTTTTTATTCAATGTGAAATCCCTGAACTTGCG 699 GCATITIGGACGCTACATICIGGAACCATITITITATICAATGIGAAATCCCTGAACTIGCG 579 AAGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTT GTACGAGICTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGATATCCCTG Gaps DB 14; Length 6080; LUNG CANCER 2; Indels APPLICANT: Lodes, Michael J.
APPLICANT: Lodes, Michael J.
APPLICANT: Lodes, Tongtong
APPLICANT: Algate, Paul A.
APPLICANT: Algate, Paul A.
TITLE OF INVENTION: COMPOSITIONS AND NETHODS FOR
TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUN
FILE REFERENCE: 210121.475C11
CURRENT APPLICATION NUMBER: US/10/144,649A
CURRENT FILING DATE: 2002-08-21
NUMBER OF SEQ ID NOS: 749
SOFTWARE: FastSEQ for Windows Version 3.0
LENGTH: 6080 333 AGGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAG Query Match
93.0%; Score 2082.8;
Best Local Similarity 97.5%; Pred. No. 0;
Matches 2148; Conservative 0; Mismatches CRGANISM: Homo sapiens US-10-144-649A-740 셤 ò

Db 1839 TTTC OY 1861 TTCC Db 1899 TTCY OY 1921 TTAC OY 1981 TACC OY 1981 TACC OY 2041 ATCC OY 2041 ATCC OY 2101 TTCC OY 2139 TTCC OY 2151 AAAAA OY 2151 AAAAA	RESULT 5 US-09-738-973-441 Sequence 441, A) FALCANT NO. US200 APPLICANT: Rec APPLICANT: THE APPLICANT: THE APPLICANT: MO APPLICANT: MO APPLICANT: IN APPLICANT: MO APPLICANT: APPLICANT: BE APPLICANT:	; FILE REFERENCE ; CURRENT APPLIC ; CURRENT APPLIC ; CURRENT FILING ; NUMBER OF SEQ ; SOFTWARE: Fas; ; SEQ ID NO 441 ; LENCTH: 5981 ; TYPE: DNA ; ORGANISM: Hom US-09-738-973-441 US-09-738-973-441 Best Local Simi	Oy 3 AGG Db 1 AGG Oy 63 AAT Db 61 AAT OY 123 TAG
	GGACCTITTCTGAGGGGCTACTGGGAAAITTCTCATTAGCAGTTCCGATCTTTGTTGCC GTGACCTTTTCTGAGGGGCTACTGGGAAAITTCTCATTAGCAGTTCCGATCTTTGTTGCC CTCTCCTGCTTTGGCTCCATGAAGGTGGTGTTTGCTGTCTCCAGGTTATTCTTGTT [	1411 GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCA	TATCTGAAACTTGGGACAAGAACCCAGGTGGTTTAGAATAATGTCAGAGAAATA ACCAGAACATTATTATTATGGGACAAGAACCCAGGTGGTTTAGAATAATGTCAGAGAAATA ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAAT ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGGGATATTAACTTCAT GGACTTGAGATCTTGGCAATCTGCCCAAGGGGACACAAAATAGGGATTTTTACTTCAT GGACTTGAGGATCTTGGCAATCTGCCCAAGGGGACACAAAATAGGGATTTTTACTTCAT TTTCTGAAAGTTTTGGCAATCTGCCCAAGGGGACACAAAATAGGGATTTTTACTTCAT TTTCTGAAAGTCTTGGCAATCTGCCCAAGGGGACACAAAAATAGGGATTTTTACTTCAT TTTCTGAAAGTCTTGAAATTACAACTTTGGTGAAAAAAAA
B & B & B & B & B & B & B & B & B & B &	8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	6 6 6 6 6 6	6 6 6 6 6 6

```
CATATATTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAG 1920
                                                                                                                                                                                                           2040
                                                                                                                                                                                                                                                  2078
                                                                                                                                                                                                                                                                                                                                    2138
                                                                                                                                             Ä
CCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTA 1898
                                                                                                                         ATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC 1980
                                                                                                                                                                                                                                                                                            FITAGCACGCCAAAGAACCTICAAATIGAAGACTGAGATTITICTGTATATATGGGTT 2100
                                                                                                                                                                                                                                                                                                                                                                            STAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTG 2160
                                                                                                                                                                                                                                                                                                                                                                                                                    sraaagaregririracacacracagargreraracrereaaaagrerrireaarrere 2198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATTITATCATATICTGGATTTTTTGGATTCTTTTGTTTTCTCATCACTGGATTCAGG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAAGGAAAAAAAAAAAAAAAAAAAAAAAGAGAGAAAATTCCAGGCCAATTGTGGCA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                 CTATTGGGGTTAGGAGAAAAAGACTAGACAATTACTATGTGGTCATTCTCTACAACAT
                                                                                                                                                                                                                                                                                                                     GTTGAAGTGAGAGAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTGAAGTGAAGCAAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAACAG
                                                                                                                                                                                                           CCTATTGGGGGTTAGGAGAAAAACTTAGACAATTACTATGTGGGTCATTCTCTACAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Indels 54; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92.9%; Score 2080.8; DB 10; Length 5981; 97.5%; Pred. No. 0; Eive 0; Mismatches 2; Indels 54; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tallos, Michael D.

ANTION: COMPOSITIONS AND METHODS FOR MYTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER E: 210121.475C9
CCATION NUMBER: US/09/738,973
(G DATE: 2000-12-14)
ID NOS: 587
istsEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAGCATACATCATGATTATGGCAAAGGAGGAGGAAGAA 2242
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAGCATACATCATGATTATGGCAAAGAGGAGAAGGTA 2204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09738973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lgate, Paul A.
ecrist, Heather
ndirias, Carol Yoseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Reed, Steven G.
Henderson, Robert A.
Lodes, Michael J.
Fling, Steven P.
Mohamath, Raodoh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      enson, Darin R.
Iliot, Mark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 omo sapiens
41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ilarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATION:
```

<u>\_</u>

1442 1386 1502 1562 1506 1622 1742 1686 1802

1682

1862

1922 1866 1982

1926

2042

2102 2046 2162 2106

CCTATTGGGGTTAGGAGAAAGACTAGACAATTACTATGGGCCATTCTCTACAACATAT CCTATTGGGGTTAGGAGAAAAGACTAGACAATTACTATGGGGCATTCTCTACAACAAGA 2047 GTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTGAA GTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTGAA GTTAGCACGGCAAAGAACCTTCAAATTGAAGACTGAGATTTTTCTGTATATATGGGTTTT  ω

902 846 962 906 1022

996

1082 1026 1142 1086 1202 1146 1262 1206 1322 1266 1382 1326 1442 1386 1502 1446 1562 1506 1622 1566 1682

us-09-667-170a-440.rnpb

```
1807 CATATATITTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAGTT 1866
                                                                                                                                                                                             963 ATAIGCIGGCITITIACCICAACITIGITACIGAAGAAGIAGAAAACCCIGAAAAAC
                                                                                                                                                                                                                           787 TATAGICCCIGGAGITATGCAGCIAATIAAAGGICAAACGCAGAACTITAAAAGACGCCTT
                                                                                                                                           TTCAGGAAGAATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATGC
                                                                                                                                                                                                                                                                                                       967 CATTCCCCTIGCAATAIGTATAICCAIGGCCATIGTCACCATIGGCTAIGTGCTGACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTGTCTCCCAGGTTATTCTATGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCTCGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTTATTGGGCTGCCAGTTGC
                                                                                                                                                                                                                                                                                                                                                                                     1027 TGTGCCCTACTTACGACCATTAATGCTGAGGAGCTGCTGCTGCTTCAATGCAGTGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCTGCTTTGGCTCCATGAACGGTGGTGTTTTGCTGTTCTCCAGGTTATTCTATGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCTCGAGAGGGTCACCTTCCAGAAATCCTCCATGATTCATGTCCGGCAAGCACACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTATTGGGGCTGGCAGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTTTATTATATGGGACAAGAACCCAGGTGGTTTAGAATAATGTCAGAGAAATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGTGCTGACAAA
                                                                                                                                                                                                                                                                                                                                                              TGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCTITICTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACCTITITCTGAGCGCCTACTGGGAATTTCTCATTAGCAGTTCCGATCTTGCTGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATATATTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTTTATGTAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTACCAGCTGTTATTGTTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GITCAICCCAGCITITGITITICCITICACAIGCCTCTICAIGGITGCCCTTITCCCTCTAITC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gricarccadcriricriricaria caractricaria caractricaria contractricaria contractrica contractri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGACCCATTTAGTACAGGGATTGGCTTCGTCACTCTGACTGGAGTCCCTGCGTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTTGAGATCTTGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGAAAGICTAGAAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCAGGAAGAGTTCAAGTATTACGCGGTTGCCACTGGC
                                                                                                                                                       847
                                                                                                                                                                                                                                     907
                                                                                                                                                                                                                                                                                1023
                                                                                                                                                                                                                                                                                                                                                              1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1687
                                     843
                                                                                                                 903
                                                                                                                                                                                                                                                                                                                                                                                                                                            1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1863
                                                                     g
                                                                                                                                                   9
                                                                                                                                                                                           \stackrel{\sim}{\circ}
                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                             ò
                                                                                                                                                                                                                                                                              ₹
                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                         ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAG 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAAT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----GAGAAGTGCAGCTGAAGAAGTGCAGCAGCAGAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AGGTTGAAGTGAGGAGAGATCATGCCAGCCTGGGTGACAGTGACAGTGACACTCTGTCTCAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 TAGATITIAICATATICTGGATTTTTTGGATTCTTTTGTTTTCTCATCACTGGATTCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTTTCAGGAAGACGCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAAGAAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACGAGTCGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTIGGACGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCGGT
                                                                                                                                                                                                                                                                                                                                                                        AGGITGAAGTGAAGAATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATTAAGGAAAAAAAAAAAAAAAAAAAAAAAGAGAGGAAATTCCAGGCCAATTGTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGATITITATCATATTCTGGATTTTTTGGATTCTTTTGTTTTTCTCATCACTGGATTCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTGGACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACGAGICTGGGTGGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCIGGAGGICATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGT
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                              DB 10; Length 5981;
                                                                                                                                                                                                                                                                                                                                      54;
                                 METHODS FOR DIAGNOSIS OF LUNG CANCER
                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAG
                                                                                                                                                                                                                                                                                          92.9%; Score 2080.8; llarity 97.5%; Pred. No. 0; Conservative 0; Mismatches
APPLICANT: Secrist, Heather
TITLE OF INVENTION: COMPOSITIONS AND METHODS
TITLE OF INVENTION: THE THERAPY AND DIAGNOS;
FILE BEFRENCE: 210121.475210
CURRENT APPLICATION NUMBER: US/09/854,133
CURRENT FILING DATE: 2001-05-11
NUMBER OF SEQ ID NOS: 735
SOFTWARE: PSSESEQ for Windows Version 3.0
SEQ ID NO 441
LENGTH: 5981
                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                      TYPE: DNA
COGANISM: Homo sapiens
US-09-854-133-441
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 2146; Conserv
                                                                                                                                                                                                                                                                                                                                                                          ო
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     783
                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

us-09-667-170a-440.rnpb

	"IGGAGGICATIACACAIAIATITIGGAAGICTITIGGICCATIACCAGCTITIG" S CTGGGIGGAACTCCTCAIAATACGCCCIGCACTACTGCTGTATATACCCTGGG CTGGGIGGAACTCCTCAIAATACGCCCTGCAGCTACTGCTGTGATATACCTGGG ACGCTACATTCTGGAACTATTTATATACAATGGAAAATCCCTGGACTTGCGT ACGCTACATTCTGGAACCATTTTTTATTCAATGGAAAATCCCTGGACTTGCGT AACGCTACATTCTGGAACCCATTTTTTTTTT	CAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAG 78	TATAGTCCCT TTCAGGAAGA TTCAGGAAGA TTCAGGAAGA ATATGCTGGC	1023 CATTCCCCTTGCAATATCTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAAA 1082 967 [	1203 CTCCTGCTTTGGCTCCATGAACGGTGTGTTTGCTGTCTCCAGGTTATTCTATGTTGC 1262 1147 CTCCTGCTTTGGCTCCATGAACGGTGTGTTTGCTGTTCTCCAGGTTATTCTATGTTGC 1206 1263 GTCTCGAAGAGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTTCCTGTTTGC 1206 1207 GTCTCGAAGAGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCTCTCTGCAAGCACTCC 1266 1323 TCTACCAGCTTATTTTTGCACCTTTTGACATGATAATGCTCTTCTCTGGAGACCT 1326 1267 TCTACCAGCTGTTATTTTTTGCACCTTTTGACATGATAATGCTCTTCTCTGGAGACCT 1326 1383 CGACAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
4 8 8 8 8 8	8 8 8 8	6 6 6 6 6	6 6 6 6	6 6 6 6 6	6 2 6 6 6 6 6 6 6
QY         1923 ATAGAAAGTGAATATCCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACCTA         1982           Db         1867 ATAGAAAGTGAATATCTATGAGTCGCACAATTCTTGAGTCTCTGATACCTA         1926           CQ         1983 CCTATTGGGGTTAGGAGAAAGACTAGACAATTACTATGAGGTCTTCTCTACAACATA         2042           Db         .         1927 CCTATTGGGGTTAGGAGAAAGACTAGAGCTAGTAGTGGTCATTCTCTACAACATAT         1986           CQ         2043 GTTAGCACGGCAAAGAACAATTACTATGAGGTCATTCTCTACAACATAT         2102           Db         .         2043 GTTAGCACGGCAAAGAACTCCAAATTACAAGACTGAGATTTTCTGTATATATGGGTTT         2102           Db         .         .         .           CA         .         .         .           CA         .         .         .           CA         .         .         .           CA         .         .           CA         .         .           Db         .         .           1987 GTTAGCACGCCAAAGAACTTCCAAATTGAAAGACTTATATATA	Db 2047 GIAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTTTTTTTT	Sequence 441, Application US/10144649A  Publication No. US20030118599A1  GENERAL INFORMATION:  APPLICANT: Lodes, Michael J.  APPLICANT: Wang, Tongtong  APPLICANT: Fan, Liqun  APPLICANT: Ran, Liqun  APPLICANT: Modeill, Patricia D.  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR  TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER	; CURRENT APPLICATION NUMBER: US. 10/144,649A; CURRENT APPLICATION NUMBER: US. 10/10/144,649A; CURRENT FILING DATE: 2002-08-21; NUMBER OF SEQ ID NOS: 749; SEQ ID NO 441; SEQ ID NO 441; SEQ ID NO 441; TYPE: DNA; ORGANISM: Homo sapiens; ORGANISM: Homo sapiens	Query Match         92.9%;         Score 2080.8;         DB 14;         Length 5981;           Best Local Similarity         97.5%;         Pred. No. 0,         0.         0.         1;           Matches 2146;         Conservative         0;         Mismatches         2;         Indels         54;         Gaps         1;           Oy         3 AGGTTGAAGTGAGCAGAGATCATGCCAGCTGGGTGACACTGAGACTCTGTCTCTCAAACG         60           Db         63 AATTAAGGAAAAAAGAAAAAAAAAAAAAAAAAAAAAAA	1 8 8 4 4 0 7 6 6 2

us-09-667-170a-440.rnpb

```
; SEQ ID NO 31

; LENGTH: 3144

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-163-866-31
                                                                                                                                                                                                                                                                                                                         Ĕ
                                                                                                                                                                                                   68
                                                                                                                                                                                                                                                                            362
                                                                                                                                                                                                                                                                                                                                                 194
                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 962
                                                                                                                                                                                                                                                    106
                                                                                                                                                                                                                                                                                                                         422
                                                                                                                                                                                                                                                                                                                                                                                                                                             314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  902
                                                                                                                             ò
                                                                                                                                                  쉽
                                                                                                                                                                          ò
                                                                                                                                                                                                g
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ζ
                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठ
TGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACT 1446
                              1562
                                                     1506
                                                                                                   1566
                                                                                                                          1682
                                                                                                                                                  1626
                                                                                                                                                                          1742
                                                                                                                                                                                                 1686
                                                                                                                                                                                                                          1802
                                                                                                                                                                                                                                                 1746
                                                                                                                                                                                                                                                                         1862
                                                                             1622
                                                                                                                                                                                                                                                                                                1806
                                                                                                                                                                                                                                                                                                                        1922
                                                                                                                                                                                                                                                                                                                                                                                                                     2042
                                                                                                                                                                                                                                                                                                                                                                                                                                            1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2102
                                                                                                                                                                                                                                                                                                                                               1866
                                                                                                                                                                                                                                                                                                                                                                ATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACCTA 1982
                                                                                                                                                                                                                                                                                                                                                                             2162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTGAA 2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THE PS3 PATHWAY AND METHODS OF
                         GTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGCTTGCCCTTTCCTCTATTC
                                                                      GGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTGGACTGGAGTCCCTGCGTATTA
                                                                                    TCTCTTTATTATATGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAAC
                                                                                                                                   1567 TCTCTTTATTATATGGGACAAGAACCCAGGTGGTTAGAATAATGTCAGAGAAAATAAC
                                                                                                                                                                    CAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAATGG
                                                                                                                                                                                    1687 ACTTGAGATCTTGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCATTT
                                                                                                                                                                                                                                                                   TCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAAAAAAGGAGTCAGTTATTTTATT
                                                                                                                                                                                                                                                                                      1747 TCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTTATT
                                                                                                                                                                                                                                                                                                                                    CATATATTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTATTGGGGTTAGGAGAAAAGACTAGACAATTACTATGTGGTCATTCTCTATACAACATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTGAA
                                            1447 GIICAICCCAGCIIIGIIIIICCIICACAIGCCICTICAIGGIIGCIICAIGCIIGIIII
                                                                                                                                                                                                                    ACTIGAGAICTIGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCATTT
                                                                                                                                                                                                                                                                                                                   CATATATTITIAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAGTT
                                                                                                                                                                                                                                                                                                                                                                                                               CCTATTGGGGTTAGGAGAAAAGACTAGACAATTACTATGTGGTCATTCTCTACAACATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTAGCACGCAAAGAACCTTCAAATTGAAGACTGAGATTTTTCTGTATATATGGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAGCATACATGATTATGGCAAAGAGGAGAGAGGTA 2204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-163-866-31
Sequence 31, Application US/10163866
Publication No. US20030027188A1
SEMERAL INFORMATION:
APPLICANT: EXELIXIS, INC.
TITLE OF INVENTION: SLC78 AS MODIFIERS OF THE FILE REFERENCE: EXO2-080C
CURRENT APPLICATION NUMBER: US/10/163,866
CURRENT FILING DATE: 2002-06-05
PRIOR PRILOMION NUMBER: US 60/296,076
PRIOR PRILOMION NUMBER: US 60/328,605
PRIOR PILING DATE: 2001-06-05
PRIOR PILING DATE: 2001-06-05
PRIOR APPLICATION NUMBER: US 60/338,733
PRIOR PILING DATE: 2001-10-10
PRIOR APPLICATION NUMBER: US 60/357,253
PRIOR PILING DATE: 2002-02-15
PRIOR PILING DATE: 2002-02-15
PRIOR PILING DATE: 2002-02-15
PRIOR PILING DATE: 2002-02-15
NUMBER OF SEQ ID NOS: 54
NUMBER OF SEQ ID NOS: 54
                                                                        1563
                                                                                                1507
                                                                                                                      1623
                                                                                                                                                                     1683
                                                                                                                                                                                             1627
                                                                                                                                                                                                                     1743
  1387
                                                                                                                                                                                                                                                                    1803
                                                                                                                                                                                                                                                                                                                                         1807
                                                                                                                                                                                                                                                                                                                                                                                        1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1987
                          1503
                                                                                                                                                                                                                                                                                                                   1863
                                                                                                                                                                                                                                                                                                                                                                  1923
                                                                                                                                                                                                                                                                                                                                                                                                                1983
                                                                                                                                                                                                                                                                                                                                                                                                                                       1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2163
                        \stackrel{>}{\partial}
                                              뭐
                                                                     ò
                                                                                           g
                                                                                                                     ò
                                                                                                                                       g
                                                                                                                                                                   à
                                                                                                                                                                                           임
                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                         업
                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                               \overset{\sim}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \overset{\circ}{\alpha}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
```

```
241
                                                                                                                                       301
                                                                                                                                                                                                                                        133
                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                          193
                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            613
                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    913
                                                                                           8 GAAAGCCTGTTGTGTCCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA
                                                                                                                                242 GGCTGCCTTCCCTGGGCAACAAGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGACG
                                                                                                                                                                                                                                                                                                                                                    182 GAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA
                                                                                                                                                                                                                                                                                                                                                                                                   TGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGTGGGGTCCTGTCACTATTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   542 AGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTG
                                                                                                                                                      302 CCTTTTCAGGAAGACGCCTTTTCAGGAAGAGAAAAAGTGCAGCTGAAGAGGAAAGTCA
                                                                                                                                                                                                                              134 CTTTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCT
                                                                                                                                                                                                                                                                                                                                    CCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAA
                                                                                                                                                                                                                                                                    CITIACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATITIGGACGCTACATICIGGAACCATITITITATICAAIGIGAAAICCCIGAACTIGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCTAAATAGCATGAGTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITCAGGAAGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1082 ATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTTTCAAATGCAGTGGCAG
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAAGACGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITCAGGAAGAATICAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCCTGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1022 CCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 3144;
                                       54;
                                      Indels
     DB 14;
                                    3;
 Score 1900.2;
Pred. No. 0;
0; Mismatches
Query Match
Best Local Similarity 97.2%;
Matches 1966; Conservative (
```

g à Dp  $\delta$ d ö g ò ad 8 gg

ò

8

```
Sequence 29, Application US/10163866

Publication No. US20030027188A1

GENERAL INFORMATION:

APPLICANT: EXELIXES, INC.

ITILE OF INVENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE

FILE REPRENENCE: EXO2-080C

CURRENT APPLICATION NUMBER: US/10/163,866

CURRENT FILING DATE: 2002-06-05

PRIOR APPLICATION NUMBER: US 60/296,076

PRIOR APPLICATION NUMBER: US 60/328,605

PRIOR FILING DATE: 2001-10-10

PRIOR FILING DATE: 2001-10-22

PRIOR FILING DATE: 2002-02-15

PRIOR PRIOR FILING DATE: 2002-02-15

PRIOR PRIOR FILING DATE: 2002-02-15

PRIOR FILING DATE: 2002-02-15

PRIOR FILING DATE: 2002-02-15

PRIOR FILING DATE: 2002-02-15

PRIOR PLING DATE: 2002-02-15

SROID NOS: 54

SOSTWARE: PATENTH VENEZION NUMBER: US 60/357,600

PRIOR FILING DATE: 2002-02-15

NUMBER OF SEQ ID NOS: 54

SEQ ID NO 29

LENGTH: 2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           242 GGCTGCCTTCCCTGGGCAACAAGAGCCACCTCGGCAAGACGCCTTTTCAGGAAGAGACG 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  239 GAAAGCCTGTTGTGTCCACCATCTCCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       545 AGAAAICTGGAGGICATTACACATAIATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       365 CITTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           425 CTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             485 TATGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182 GAAAGCCTGTTGTGTCCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302 CCTTTTCAGGAAGACGCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGAAAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         665 CATITGGACGCIACATICTGGAACCATTITIATICAATGTGAAATCCCTGAACTTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            542 AGAAATCTGGAGGTCATTACACATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      602 TACGAGICIGGGIGGAACICCICATAATACGCCCIGCAGCIACIGCIGIGAIAICCCIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      662 CATTIGGACGCIACALICIGGAACCALTITITIALICAALGIGAAATCCCIGAACTIGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 14; Length 2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299 GGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.3%; Score 1888.2; 97.1%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 97.1
Matches 1965; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
COGANISM: Homo sapiens
US-10-163-866-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                 rcrccrctrrgcrccargaacgrggrgrrrrgcrgrcrccaggrarrcrargrr 1033
                                                                                                                                                            CGTCTCGAGAGGGTCACCTTCCAGAAATCCTCCATGATTCATGTCCGCAAGCACACTC 1321
                                                                                                                                                                                   CICTACCAGCIGITATIGITITIGCACCCTTIGACAAIGATAAIGCICTICTCTGGAGACC 1153
                                                                                                                                                                                                                                                                                                                        TCGACAGICITITGAATTICCTCAGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTG 1441
                                                                                                                                                                                                                                                                                                                                                                                                      CTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCAC 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1393
                                                                              TCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTG 1261
                                                                                                                                                                                                                                          CTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTGGAGACC 1381
                                                                                                                                                                                                                                                                                                                                                 CGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCGACTGGAGTCCCTGCGTATT 1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAA 1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Arcrittarrarardedacaacaacccaggreerrragaararcrcagagaaaraa 1453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAATG 1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGAAGATAAGTTATGAACTAATG 1513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTGA 2161
                           1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rérricarccascirrerrircerreacarscercircarssirsecerrirecerenary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCATATATTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCTATTGGGGTTAGGAGAAAAGACTAGACAATTACTATGTGGTCATTGTGTAGAACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rgriagcacccaaagaaccricaaarrgaagacrcagarrrrrcrgratararggrir
                                                                                                                                                                                                                                                                                                                                                                                                                                              credecrearitrarcricearacaarideceasararecarescerricaasserseese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTCATGGTTGCCCTTTCCCTCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cesaccearinasiacassarinsscricercarcacreacresasiacerrecerarin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCATATATTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATAGAAAGTGAATATGCAGTTATGAGTCGCACAATTCTTGAGTCTCTGATACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acctatriggigitaggagagagactagacaatractargiggicatrcrctacaacata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTIGAGAICTIGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTTAGCACGGCAAAGAACCTTCAAATTGAAGACTGAGATTTTTCTGTATATATGGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAAAAGCATACATCATGATTATGGCAAAGAGGAGAAGGTA
1142
                                                                              1202
                                                                                                                    974
                                                                                                                                                              1262
                                                                                                                                                                                                    1034
                                                                                                                                                                                                                                            1322
                                                                                                                                                                                                                                                                                  1094
                                                                                                                                                                                                                                                                                                                          1382
                                                                                                                                                                                                                                                                                                                                                                1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1694
                                                                                                                                                                                                                                                                                                                                                                                                        1442
                                                                                                                                                                                                                                                                                                                                                                                                                                              1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2042
```

g

ð g

ò

ò

ò g DP DP

à g ò d ŏ g ð

à

g

à 엄 ò

Db 1865 TCATAIATTTAGCAIATTCTAAGAATTTAGTTATAACTCTATGTAGT 1924  Qy 1922 TATAGAAAGTGAATATCGAACTAATTTCTAAGAATTTAGTTATAACTCTATGTAGT 1924  Db 1925 TATAGAAAGTGAATATCGATTTCTATGAGTCGCACAATTCTTGAGTCTCTGATACCT 1984  Qy 1982 ACCTATTGGGGTTAGGAGAAACACTAATTACTAGGTCTCTCTACAACTA 2041  Db 1985 ACCTATTGGGGTTAGGAGAAACACTAACTACTAGGTCTCTCTACAACATA 2041  Qy 2042 TGTTAGGAGGAAAGAACACTACAATTACTAGGGCTTTTTCTGTATATATGGGTTT 2104  Qy 2102 TGTTAGGACAAGAACAACTACAAATTGAAGACTGAAGATTTTTCTGTATATATGGGTTT 2104  Qy 2102 TGTTAGCACGCAAAGAACACTACAAATTGAAGACTGAAATTTTTCTGTATATATGGGTTT 2104  Qy 2102 TGTAAACATGATTTACACACTACAAATTGAAGACTGAAAAGTGTTTTCTGTATATATGAGGTTT 2104  Qy 2105 TGTAAAGATGGTTTTACACACTACAAGATGTCTATAATATCAATTCTGA 2161  Db 2105 TGTAAAAGATGTTTTACACACTACAAGAGGAAGGAAGGAA	RESULT 10   10   10   10   10   10   10   10
	1142 TGACCTITTCTGAGCGGCTACTGGGAATTTCTCATTAGCAGTTCCGCATCTTTGTTGCCC 1201 1145 TGACCTTTTGTGGCCCATGGGAATTTCTCATTAGCAGTTCCGCATCTTTGTTGCCC 1204 1205 TCTCCTGCTTTGGCTCCATGAACGGGGGTTTTTCTATTCTTTCT

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

1514 1561 1574 1621		Db   1814   TITCTGRAAGTCTAGAGAATTACAACTTTGGTGATAAACGAAAAGGAGTCAGTTATTTTA 1873   1873   1861   TICATATATTTTAGCAACTTTTGGACTAGAAATTTAGTTATAACTCTATGTAG 1920   1874   TICATATATTTTAGCATATTCGAACTAATTTCTAAGAAAATTTAGTTATACTTATGTAG 1933   CV   1921   TTATAGAAAGTGAATTTCTATGAGTCGCACAATTCTTGAGTACT (1980   1934   TATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC (1993   CV   1981   TACCTATTGGAGTGAAAAGATTAGTAGAGTCGCCAAATTCTTGAGTCTCTGATACC (1993   CV   1981   TACCTATTGGAGTAAAGAAAAGACTAAACAAAAAGATAACTATTGGTCAT 2028   TATAGAAAGAAAAGAAAAGACTAAATTACTATTGGTCAT 2028   TATAGAAAGAAAAGAAAAGACTAAATTACTATTGGTCAT 2028   TATAGAAAAGAAAAGAAAAGACTAAATTACTATTGGTCAT 2028   TATAGAAAAGAAAAGAAAAGACTAAATTACTATTGGTCAT 2028   TATAGAAAAGAAAAAAACTAATAGTAATTAGTTATTAGTTATTAGTTATTAGTTATTA	5 3 3
421 TCTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACG 480	601 GTACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTG 660 614 GTACGAGTCTGGGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTG 673 661 GCATTTGGACGCTACATTCTGGAACCATTTTTTATTCAATGTGAAATCCCTGAACTTGCG 720 674 GCATTTGGACGCTACATTCTGGAACCATTTTTTTTTTCAATGTGAAATCCCTGAACTTGCG 733 721 ATCAAGCTGTACATTACAGCTGTGGGCATAACTGTAATGTGAAATCCCTGAACTTGCG 733		914 IIIICANGARANAATICAAGTATAACGGGTTGCCACTGGCTTTTTATATATATGAAAAAA 1020 974 GCATATGCTGGCTGGTTTTACCTCAACTTTTTACTGAAGAAGTAGAAAACCCTGAAAA 1020 974 GCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAGTAGAAAACCCTGAAAA 1023 1021 ACCATTCCCCTTGCAATTTACCTGAGGCATTGCTCACTTGGCTATGTGCTGACA 1093 1023 ACCATTCCCCTTGCAATTTACCATGGCCATTGTCACCATTGGCTATGTGCTGACA 1093 1034 ACCATTCCCCTTGCAATTGTAATGCTGAGGCTGCTGCTTCCAATGGCTGACA 1153 1041 GTGACCTTTTCTGAGGCCTACTTAATGCTGAGGAGTCCCATTGAATGCTGAGGCT 1140 1154 GTGACCTTTTCTGAGGCCTACTTAATGCTGAGGAGTTCCAATTGCTTTCAAATGCTGAGAA 1153 1154 GTGACCTTTTCTGAGGCGCTACTTGAGGAGGTGGTTTCCAATTGCTGTTTTTTTT

Qy         1321 CCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGAC 1380           Db         1334 CCTCTACCAGCTGTTATTGTTTTGCCACCCTTTGACAATGATAATGCTCTTCTCTGGAGAC 1393           Qy         1381 CTCGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTT 1440           Db         1394 CTCGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTT 1453           Qy         1441 GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCTTTCAAGGTGCCA 1513           Db         1454 GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGACATTTCAAACGTGCCA 1513	1501 CTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCTCTAT 1	1574 TCGGACCCATTAGTACAGGGATTGCCTTCGTCATCACTCTGGAGTCCCTGCGTATTAGTACAGGGATTGCTATTAGTACAGGGATTGCTATTAGTACAGGAGATCCCTGCGTATTAGTACAGGAGAAATATATAT	OY 1681 ACCAGAACTATACAAATAATAACTGGAAGTTGTGTACGAGAAGATAATTATGAACTAAT 1740  1694 ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGATAAGTTATGAACTAAT 1753  QY 1741 GGACTTGAGATCTTGGCAATCTGCCCAAGGGGAGACACAAAATAGGGTTTTTACTTCAT 1800  DD 1754 GGACTTGAGATCTTGGCAATCTGCCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCAT 1813	Oy 1801 TTTCTGAAAGTCTAGAGAATTACAACTTTGGTGATAACAAAAGGAGTCAGTTATTTTA 1860  Db 1814 TTTCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTA 1873  Oy 1861 TTATAGACATTAGACATTAGAAATTTCTAAGAAAATTTAGTTATATTATTAGAGAGTCAGTTATTTTAGAGAAAATTTAGAGAAAATTTAGAGAAAATTTATAGAGAAAATTTAGAGAAAATTTAGAGAAAAAGAAAATTAGATAGAAAAAA	1874	Qy 1981 TACCTATTGGGGTTAGGAGAAAGACTAGACAATTACTATGTGGTCAT 2028 	RESULT 12  US-10-163-866-30  ; Sequence 30, Application US/10163866 ; Publication No. US20030027188A1 ; GENERAL INFORMATION: ; APPLACAT: EXELISTS, INC. ; TITLE OF INVENTION: SLC7'S AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE	; THIS REFERENCE: BXO2-080C ; CURRENT PELLOATION WOMBER: US/10/163,866 ; CURRENT FILING DATE: 2002-06-05 ; PRIOR APPLICATION NUMBER: US 60/296,076 ; PRIOR PITING DATE: 2001-06.05	FRIOR APPLICATION NUMBER: US 60/328,605  PRIOR FILING DATE: 2001-10-10  FRIOR PRESSENCE TO 60/338,733  PRIOR PRESSENCE TO 60/338,733	FRIOR APPLICATION NUMBER: US 60/357,253  PRIOR FILING DATE: 2002-02-15  PRIOR PEPLICATION NUMBER: US 60/357,600  PRIOR PITTAG DATE: 2002-03-15	FILMS FILMS DATE: LOUG-02-15  NUMBER OF SEQ ID NOS: 54  ; SOFTWARE: PatentIn version 3.1  ; ERO ID NO 30  LENGTH: 1861
241 AGGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGCC 300 308 AGGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGC	4 ACTITACTGAGGGGGTCTCCATTATCATTGGCACCATCATTGGAGCAGGATCTTCATC 43  1 TCTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGAGG 48	481 GTGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATA 540 494 GTGTGTGGGGTCCTGTCACTATTTGGGAGCTTTGTTTTTTTT	601 GTACGAGTCTGGGTGGAACTCCTCATAATACGCCTGCAGCTACTGCTGTGATATCCCTG 660	ATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCGTAATTGCGGGGTAATTGCTGGGTAATTGCTCGTAGTGATGGTCGTAATTGCTGTAGTGATGGTCGTAATTGCTGTAGTGATGGTCGTAATTGCTGTAGTGATGGTCCTAAATTGCTGTAGTGATGGTCCTAAATTGCTAATTGCTAATTGCTAATTGCTAATTGCTAATTGCTAATTAACTAATTAACTAATTAACTAATTAACTAATTAA	ACTGGAGCCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACGCAATTCTGATA ATTATAGTCCCTGGAGTTATGCAATTAAAGGTCAAAGGCGAAACTTTAAAGACGC  ATTATAGTCCCTGGAGTTATGCAATTAAAGGTCAAACGCAGAACTTTAAAGACGCC  ATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGAAGGCC	901 TITICAGGAAGAGATICAAGTATTACGCGGTIGCCACTGGCTITITATTATGGAATGTAT 960 	961 GCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAAACCTGAAAAA 1020	1081 AATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTGCTTCAAATGCAGTGGCA 1140 	1141 GTGACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCC 1200 	1201 CTCTCCTGCTTTGGCTCCATGAACGGTGTGTTTGCTGTCTCCAGGTTATTCTATGTT 1260	1261 GCGTCTCGAGAGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACT 1320 

1328

1321

1388

1448

1501

1561 1568 1621 1628

1688 1741

OSE

1681

```
GACTICAGATCTIGGCAATCTGCCCAAGGGGAGACACAAAATAGGGGATTTTACTTCATT 1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THE P53 PATHWAY AND METHODS OF
       CTCTACCAGCTGTTATTGTTTTGCACCCTTTCACAATCATCATCTTCTTCTCGGAGACC
                                                                                                                                                                                                                        1382 TCGACAGTCTTTTGAATTTCCTCAGTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTG
                                                                                                                                                                                                                                                1389 †CGACAGICTITIGAATTICCTCAGITITGCCAGGIGGCTITITAITGGCCTGCAGGITG
                                                                                                                                                                                                                                                                                                                                                         1629 ATCTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1689 CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGAAGATAAGAACTAATG
                                                    TCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTTGCTGTCTCCAGGTTATTCTATGTTG
                                                                                                            CGTCTCGAGAGGGTCACCTTCCAGAAATCCTCCATGATTCATGTCCGCAAGCACACTC
                                                                                                                                                                                    1329 CTCTACCAGCTGTTATTGTTTTGCACCCTTTGACATGATGATATGCTCTTCTGGGGACC
                                                                                                                                                                                                                                                                                                   1449 CTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                 1562 GGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTATT
                                                                                                                                                                                                                                                                                                                                                                                                                  1622 ATCTCTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAATG
                                                                                                                                                                                                                                                                                                                                       TGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCTTTTCCTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAA 1843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAAAAA 1850
                                                                                                                                                                                                                                                                                 CTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-1016.3-866-33

US-1016.3-866-33

Sequence 33, Application US/10163866

Publication No. USZ0030027188A1

Sequence 13, Application US/10163866

TILLE APPLICANT: EXELIXIS, INC.

TILLE REFERENCE: EX02-080C

CURRENT APPLICATION NUMBER: US/10/163,866

CURRENT APPLICATION NUMBER: US 60/296,076

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-010-10

PRIOR FILING DATE: 2001-02-2

PRIOR FILING DATE: 2001-0-10

PRIOR FILING DATE: 2001-0-10

PRIOR FILING DATE: 2002-02-15

PRIOR FILING DATE: 2002-02-15

PRIOR FILING DATE: 2002-02-15

NUMBER OF SEQ ID NOS: 54

SOFTWARE: PATENTIN VERSION 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEO ID NO 33
LENGTH: 1542
TYPE: DNA
                        1149
                                                    1202
                                                                               1209
                                                                                                                                     1269
                                                                                                                                                                  1322
                                                                                                                                                                                                                                                                                                                                        1502
                                                                                                            1262
                                                                                                                                                                                                                                                                                 1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1809
                                              à
                                                                           g
                                                                                                         \delta
                                                                                                                                 g
                                                                                                                                                               ò
                                                                                                                                                                                           음
                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                dd
                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                         gg
                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      심
                                                                                           ij.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATATGCTGGCTGGTTTTTACCTCAACTTTGTTACTGAAGAAGAGAAACCCTGAAAAA 1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAA 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGTGGCCTACTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCAG 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Archdectractriaccarraardereaggerecrectrireaardeaggeag 1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGACCTITICTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCCC 1201
                                                                                                                                                                                                          340
                                                                                                                                                                         GGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAAGAGGG 301
                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                368
                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                        428
                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                 488
                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                       548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCAGGAAGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTTATTATGGAATGTATG 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  243 GAAAGCCIGITGIGICCACCAICICCAAAGGAGGITACCIGCAGGGAAAIGTIAACGGGA
                                                                                                                                                                                                                               CCTTTTCAGGAAGAGGCCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGGAAAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAA
                                                                                                                  GAAAGCCTGTTGTGCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA
                                                                                                                                                                                                   decreccrrccradadadadadadaccacradadadad------
                                                                                                                                                                                                                                                                                                         CTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAAATCTGGAGGTCATTACACATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGATATCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAAACGCAGAACTTTAAAGACGCCT
                                                                                                                                                                                                                                                             CTTTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGGAAGCATCTTCATCT
                                                                                                                                                                                                                                                                                                                                                 CTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGG
                                                                                                                                                                                                                                                                                                                                                                                                       TGTGTGGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACGAGTCTGGGTGGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATITIGACGCTACATICIGGAACCATITITIATICAAIGIGAAAICCCTGAACTIGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATTIGGACGCTACATICIGGAACCATITITITATICAAIGIGAAAICCCIGAACTIGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGGTCCTAAATAGCATGAGTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAA
                                                                                          54; Gaps
                                                             DB 14; Length 1861;
                                                                                        2; Indels
                                                            Score 1540.8;
Pred. No. 0;
0; Mismatches
                                                         Query Match
Best Local Similarity 96.6%;
Matches 1606; Conservative
               ; ORGANISM: Homo sapiens
US-10-163-866-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , 609
                                                                                                                  182
                                                                                                                                                                                                    303
                                                                                                                                                                                                                                 302
                                                                                                                                                                         242
                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                     369
                                                                                                                                                                                                                                                                                                                                                 422
                                                                                                                                                                                                                                                                                                                                                                           429
                                                                                                                                                                                                                                                                                                                                                                                                       482
                                                                                                                                                                                                                                                                                                                                                                                                                                    489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1142
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      696
                                                                                                                                           g
                                                                                                                                                                                           g
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                qq
                                                                                                                  à
                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             \stackrel{\triangleright}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \tilde{\partial}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음
```

ò 음 ਨੇ Ωp ò 업 Ωp

à g ö

à

d

쉱

ð

g

ò

Ωþ

à Db ò gg ò g ò

ò

엄

d

8

ò

d ò g

```
Sequence 52, Application US/10163866

Publication No. US20030027188A1

GENERAL INFORMATION:

TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE

FILE REFERENCE: EXO2.080C

CURRENT APPLICATION NUMBER: US/10/163,866

CURRENT FILING DATE: 2002-06-05

PRIOR APPLICATION NUMBER: US 60/296,076

PRIOR APPLICATION NUMBER: US 60/328,605

PRIOR FILING DATE: 2001-10-10

PRIOR FILING DATE: 2001-10-22

PRIOR PELING DATE: 2002-02-15

PRIOR PELING DATE: 2002-02-15

PRIOR APPLICATION NUMBER: US 60/357,600

PRIOR APPLICATION NUMBER: US 60/357,600

PRIOR PILING DATE: 2002-02-15

PRIOR PILING DATE: 2002-02-15

NUMBER OF SEQ ID NOS: 54

SEQ ID NOS: 54

SEQ ID NOS: 54
                                                                                                                  1041
                                                                                                                                                                                                                                                                                                                                                                          1441
                                                                                                                                                                                                                                                                                                                                                                                                                            1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGAAGATAAGTTATGAACTAATG 1521
          922 IGACCITITICIGAGCGGCTACIGGGAAAITICICATIAGCAGITCCGAICTITGTIGCCC 981
                                                                                                             rerectientificationales de la contrata del contrata de la contrata de la contrata del contrata de la contrata del la contrata del la contrata de la contrata del la contrata de la contrata del la contrata de la contrata de la contrata de la contrata del la contrata del la contrata de la contrata del la contrata
                                                                                                                                                                                             CGTCTCGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGGACACTC
                                                                                                                                                                                                                                                                                                          TGGACAGICTITIGAATITICCTCAGITITIGCCCAGGTGGCCTTTTTAATIGGGCTGGCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1622 ATCTCTTTATTATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1402 Arcritantarargesacasaaacccassistrasaansarsitasaaraa
                                                                                                                                                             CGICICGAGAGGGICACCTICCAGAATCCTCCCATGATTCATGTCCGCAAGCACACTC
                                                                                                                                                                                                                                                               CTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACC
                                                                                                                                                                                                                                                                                                                                                                    TCGACAGTCTTTTGAATTTTCCTCAGTTTTGCCAGGTGGCTTTTTTATTGGGCTGGCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTCATCCCAGCTTTGCTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1282 Idiicalccasciligiiliccilcacaiscicilcaisciliscciliicicilai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1342 GGACCCATTTAGTACAGGATTGGCTTCGTCATCACTCGACTGGAGTCCCTGCGTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 14; Length 1528;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1431.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTIGAGAICTIG 1755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTIGAGAICTGG 1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63.9%;
96.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LENGTH: 1528
; TYPE: DNA
; ORGANISM: Homo s
US-10-163-866-52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-163-866-52
                                                          1202
                                                                                                             982
                                                                                                                                                             1262
                                                                                                                                                                                                            1042
                                                                                                                                                                                                                                                            1322
                                                                                                                                                                                                                                                                                                               1102
                                                                                                                                                                                                                                                                                                                                                                  1382
                                                                                                                                                                                                                                                                                                                                                                                                                    1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1522
                                                       õ
                                                                                                  qq
                                                                                                                                                          à
                                                                                                                                                                                                     g
                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAA 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGACCTITICIGAGCGGCTACTGGGAAATITCTCATTAGCAGTTCGGATCTTGTTGCCC 1201
                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                       113
                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  921
                                                                                                                                                                                                                                  75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             242 GGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAAGCCTGTTGTGTCCACATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                       ------GAGAAGTGCAGCTGAAGAGGAAAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142 CTTTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCTAAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTGGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGTGGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATTIGGACGCTACATICTGGAACCATTITIATICAATGTGAAATCCCTGAACTTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGGAGCGCCCGGATCCTTAAACCTTTTGCAAGCTCACAGCAATTCTGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AIGHGECTACTITACGACCATTAATGCTGAGGAGCTGCTGCTGTCAAATGCAGGGAG
                                                                                                                                                                             182 GAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                  302 CCTTTTCAGGAAGAGGCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGGAAAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGGAGGAATCTTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202 crecraaggecerecreaaacacgecagecaregecarererereacearerereacea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rereregestreretarinesascrinsrererasarinessascrana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTTGGTCCATTACCAGCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATITIGGACGCTACATICTGGAACCATITITTATICAATGTGAAATCCCTGAACTTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGGAGCGCCCGGATCTTTTTTTTTTTTTTTCCAAGCTCACAGCAATTCTGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITCAGGAAGAGAITCAAGTAITACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATG
                                                                                                                                  Gaps
                                                                               Length 1542;
                                                                                                                             1; Indels
                                                                               DB 14;
                                                                                                                                                                                                                                                                                                               76 GGCTGCCTTCCCTGGGCAACAAGAAGCACCTGGGCAG-
                                                                          Score 1454.4;
Pred. No. 0;
0; Mismatches
                                                                          Query Match
Best Local Similarity 96.5%;
Matches 1519; Conservative
ORGANISM: Homo sapiens
     ; OKGANIDM: DO
US-10-163-866-33
                                                                                                                                                                                                                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                    114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          862
```

0   0   0   0   0   0   0   0   0   0	1442 1236 1502	1296 IGHTCATCCCAGCTTTGTTTTCCTTCATGCTCTTCATGGTTGCCCTTTCCCTCTATTTTCTTTTTTTT	QY         1622 ATCTCTTATHIATAGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAAAATAA 1681           Db         1416 ATCTCTTATTATAGGACAAGAAACCCAGGTGGTTTAGAATAATGTGGAAAATAA 1475           QY         1682 CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGA 1734           Db         1476 CCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGATAAGTTATGA 1734	RESULT 15 US-10-163-866-34 ; Sequence 34, Application US/10163866 ; Rull in the Application US/10163866	; GENERAL INFORMATION: ; APPLICANT: EXELIXIS, INC. ; TITLE OF INVENTION: SLC7S AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE	; FILE REFRENCE: EX02-080C  ; CURRENT APPLICATION NUMBER: US/10/163,866  ; CURRENT FILING DATE: 2002-06-05  ; PRIOR APPLICATION NUMBER: US 60/296,076	; PRIOR FILING DATE: 2001-06-05 ; PRIOR APPLICATION NUMBER: US 60/328,605 ; PRIOR FILING DATE: 2001-10-10 ; PRIOR APPLICATION NUMBER: US 60/338,733	; PRIOR FILING DATE: 2001-10-22 ; PRIOR APPLICATION NUMBER: US 60/357,253 ; PRIOR FILING DATE: 2002-02-15 ; PRIOR APPLICATION NUMBER: US 60/357,600	; FALOK FILLING DATE: 2002-02-15; NUMBER OF SEQ ID NOS: 54; SOFTWARE: Patentin version 3.1; SEQ ID NO 34	; ILBNGTH: 2000 ; TYPE: DNA ; ORCANISM: Homo sapiens US-10-163-866-34	Query Match 61.3%; Score 1373.4; DB 14; Length 2000; Best Local Similarity 96.0%; Pred. No. 0; Matches 1441; Conservative 0; Mismatches 6; Indels 54; Gaps 1;	QY 182 GAAAGCCTGTTGTGTCCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA 241  DD 143 GAAAGCCTGTTGTGTCCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA 202	Oy 242 GGCTGCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGG 301 
Matches 1497; Conservative 0;  182 GAAAGCCTGTTGTGTCCACCATC 30 GAAAGCCTGTTGTGTCCACCATC 242 GGCTGCCTTCCCTGGGCAACAAG 90 GGCTGCCTTCCCTGGGCAACAAG 302 CCTTTCAGGAAGAGGCCTTT	12834GAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Oy         422         CTCCTAAGGGCTGCTCCAGAACACGGGCAGCTGTGTCTGACCATCTGGGGGG 481           Db         216         CTCCTAAGGGCTGCTCCAGAACACGGGGGCATGTCTCTGACCATCTGGACGG 275           Oy         482         TGTGTGGGGTCCTGTCATTTGGGGTTTGTCTTATGCTGAATTGGGAACAACTATAA 541           Db         276         TGTGTGGGGTCCTGTCACTATTTGACTTTTTGTCTTATGCTGAATTGGGAACAACTATAA 335	QY         542 AGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTTGGTCCATTACCAGCTTTTG 601           Db	Oy 662 CAITIGGACGCIACAITCIGGAACCAITITITIAITCAAIGTGAAAICCCTGAACTIGGGA 721 Db 456 CAITIGGACGCTACAITCIGGAACCAITITIAITCAAIGTGAAATCCCTGAACTIGGGA 515	Qy 722 TCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCA 781	Oy 782 GCTGGAGCGCCCGGATCCAGAITTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAA 841	OY 842 TTATAGFCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCT 901 Db 636 TTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCT 695	Oy OV TITCAGGAAGAITCAAGIATDACGGGGTTGCCACTGGCTTTTTATTATGAATGTATG 961 	Oy 962 CATAIGCIGGITITACCICAACTIIGITACTGAAGAAGAGAAAAAAAAAA	OY 1022 CCATTCCCTTGCAATAIGIATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAA 1081	OY 1082 AIGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCGG 1141	Qy 1142 TGACCTTTTCTGAGGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCC 1201	09 1202 TCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGGTGTCTCCCAGGTTATTCTATGTTG 1261 

3 3 5 1 7 5 6 8 1 7 5 6 8 1 7 6 6 0 1 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6661 721 721 781 781 783 841		2 3 2 3 4 5 6 6
AAGTCA AAGTCA AAGTCA TCATCT TCATCT TCATCA GGACGG CTATAA CTATAA CTATAA	CC-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	3-5 5-5 4-4 6-6 5	
	GATAT GATAT GATAT TGAAC TGAAC TGAAC TGAAC TGAAC TATGA	A SCHOOL STAND	
	ACTGCTGT ACTGCTGT ACTGCTGT GAAATCCC GAAATACC CTAAATAC CTCACAGC CTCACAGC CTCACAGC	CAGAACTITICATION TITITATIATI	CTTCGAATGC GTTCCGATCTT GTTCCGATCTT TCCAGGTTATT TCCAGGTTATT TCCAGGTTATT TCCAGGTTATT TCATGCCCAA TAGCTCCTTCTC ATGCTCTTCTC ATGCTCTTCTC ATGCTCTTCTC ATGCTCTTCTC ATGCTCTTCTC ATGCTCTTCTC ATGCTCTTCTCTC
AGTIC CATI	CAGCT CAGCT CAGCT CAGGT	GCTGCAACGCAGAACTTT CCACTGGCTTTTTATTAT CCACTGGCTTTTTATTAT CCTGAAGAAGAAAAA CCTGAAGAAGAAAAAAAAAA	GCTGCTTTC TATTACCAGTTCC TATTACCAGTTCC TGCTGTCTCCCAG TGCTGTCTCCAG TGCTGTCTCTCCAG TGCTGTCTCTCCAG TGCTGTCTCTCTCAG TGCTGTTCTTCTCAG TGCTGTTCTTCTCAG TGCTGTTCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
	ACGCCCTG ACGCCCTG TITIATIC TITIATIC TITIATIC TITIATIC TITIATIC TITIATIC TITIATIC TITIATIC TITIATIC TOTAGE T		
GCCTTTCAGGAAGAGA  TCCATTACATTGGCAC  TCCATTACATTGGCAC  CAGAACACGGCAGCAGGAGAGAGAGAGAGAGAG	4-4 b-5 b-5 4-4 F	TAATH COGCGG COTTENT COGCGG COTTENT COGCGG COATG	
AGACGCCTTTTC AGTCTCCATTAI AGTCTCCAGAACAC STCCAGAACAC STCCAGAACAC STCCAGAACAC STCCAGAACAC STCCAGAACAC STCCAGAACAC STCCAGAACACATACACACATACACACATACACACATACACACATACACACATACACACATACACACATACACACATACACACATACACACACATACACACATACACACATACACACACATACACACACATACACACATACACACACATACACACATACACACACACATACACACACACATACACACACATACACACACACATACACACACATACACACACATACACACACATACACACATACACACACATACACACACACATACACACACACATACACACACACATACACACACATACACACACACACATACACACACACACATAC		ATALLE ELECTRICATION OF THE PROPERTY OF THE PR	ACCATTAATC CTACTGGGAA CTACTGGGAA CTACTGGGAA CTTCCAGAA CTTCCAGAA CTTTGCAGAA GTTTTGCAC
AGAGACG GGAGTCT         	riggar   		ACTITACGACOTOCOGACOTOCOGACOTOCOGACOTOCOGACOGACOTOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC
TCAGGAAGA CTGAGGAGG CTGAGGGGG AAGGGCTT AAGGGCTT AAGGCCTT AAGGCCTT CTGAAGGT TCTGGAGGGT TCTGGAGGGT TCTGGAGGGGT TCTGGAGGGGT TCTGGAGGGGT TCTGGAGGGGT TCTGGAGGGGT TCTGGAGGGGT TCTGGAGGGGT TCTGGAGGGGGGGGGG	01666	AAGAGCTGCCTGCCTGCCTGCCTGCCTGCCTGCCTTGCCTTGCCTTGCCTTGCCTTGCCTTGCTTTGCTTTGCTTTGCTTTGCTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTGCTTTTGCTTTTGCTTTTTGCTTTTTGCTTTTTGCTTTTGCTTTTTT	
CCTTTTC. CTTTACT [	CGA CGA TTT TTT TGG AAG		
0	8 9 10 17 9 10 10 10 10 10 10 10 10 10 10 10 10 10	8 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	989 1142 1049 1109 1262 1322 01132

QQ

oy Oy

TCGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGCTTTTTATTGGGCTGGAGTTG 1441	CIGGGCIGAITUAICTICGAIACAAAIGCCCAGAIAIGCAICGICCTITCAAGGIGCCAC 1501	TGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTATT 1561	CGGACCCAITTAGTACAGGGATTGGCTTCGTCATCACTGACTGGAGTCCCTGGGTATT 1621	AICTCITTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAA 1681 	C 1682 	
1382	1442	1502	1562	1622	1682	
\$ 6	oy eg	Qy Dp	QY Db	Oy Dp	\$ q	

Search completed: October 30, 2003, 07:34:09 Job time : 1069 secs

8, Appli

Sequence 4 Sequence 4 Sequence 4

US-09-134-001C-4290 US-08-132-990A-4

US-09-252-991A-32881 US-09-107-532A-4030 US-09-252-991A-32299 US-09-328-352-4181 US-09-252-991A-30013

Sequence 32881, Ap Sequence 4030, Ap Sequence 4181, Ap Sequence 30013, A Sequence 7015, Ap Sequence 7155, Ap Sequence 26, Appl Sequence 28, Appl Sequence 28, Appl Sequence 538, Appl Sequence 6483, Ap Sequence 5330, Ap Sequence 5330, Ap Sequence 5713, Ap Sequence 6467, Ap Sequence 6713, Ap Sequence 6713, Ap Sequence 6713, Ap

US-09-328-352-601 US-09-328-352-601 US-09-328-352-7016 US-09-556-916-26 US-09-556-916-28 US-09-328-352-6483 US-09-328-352-6483 US-09-328-352-6467 US-09-328-352-6467 US-09-328-352-6467 US-09-328-352-6467 US-09-328-352-6467 US-09-328-352-6683 US-09-252-991A-26663 US-09-252-991A-18961 US-09-252-991A-18961 US-09-252-991A-18961 US-09-252-991A-18961

Sequence 26663, A Sequence 1669, Ap Sequence 1841, A Sequence 18544, A Sequence 27543, A Sequence 27543, A Sequence 27157, A Sequence 27800, Ap

US-09-252-991A-18544 US-09-252-991A-27543 US-09-328-352-4537 US-09-252-991A-29825 US-09-252-991A-27157 US-09-252-991A-27800 US-09-328-352-4928

ALIGNMENTS

US-09-328-352-4849

```
Sequence 3, Application US/09073362
Patent No. 594239
GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Yue, Henry
APPLICANT: Carley, Neil C.
TITLE OF INVENTION: AMINO ACID PERMEASE HOMOLOG
NUMBER OF SEQUEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEO for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/073,362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Cerrone, Michael C
RESISTRATION NUMBER: 39,132
REFERENCE/DOCKET NUMBER: PF-0514 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 3174 Porter Drive CITY: Palo Alto STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     650-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
480
482
472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-073-362-3
286
2782.5
2782.5
2792.5
2792.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.5
2892.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
213.5
213.5
212.5
211.5
211.5
210
209.5

      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H
      H

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4, Appli
Sequence 5743, Ap
Sequence 1, Appli
Sequence 4001, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Appli
Sequence 3, Appli
Sequence 1, Appli
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 255, App
Sequence 127, App
Sequence 3, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4001, Ap
Sequence 8, Appli
                                                                                                                                                        , Search time 38.5 Seconds
(without alignments)
4921.247 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/FUGS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/Patenty_COMB.pep:*
                 GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd.
                                                                                                          OM nucleic - protein search, using frame_plus_n2p model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-073-362-3
US-09-24-920-3
US-09-073-362-1
US-09-248-920-1
US-09-489-847-255
US-08-825-781-3
US-08-825-781-4
US-09-107-532A-5743
US-08-825-781-1
US-09-107-532A-6743
US-08-825-781-1
US-09-107-532A-6743
US-09-107-532A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      328717 seqs, 42310858 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                          October 31, 2003, 10:50:02
                                                                                                                                                                                                                                                                                                                                                                                  0.07
                                                                                                                                                                                                                                                                                                                                                                             Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                             US-09-667-170A-440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length DB
                                           Copyright
                                                                                                                                                                                                                                                                                                                                                        BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     228.1
227.5
277.5
117.7
115.1
113.0
6.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11156.5
11131.5
1131.5
141.5
730
621
615
524.5
286
                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database
                                                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            264504044
```

~

```
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/243,920
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/073,362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1705 GAAGTIGIACCAGAAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     497 CysvalLeuThrGluLeuAsp 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: SOFTWARE: FastSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-243-920-3
                                                                      1174
                                                                                                                    1234
                                                                                                                                        337
                                                                                                                                                               1294
                                              g
                                                                      à
                                                                                           g
                                                                                                                   à
                                                                                                                                      g
                                                                                                                                                              \delta
                                                                                                                                                                                    8
                                                                                                                                                                                                          à
                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1053
                                                                                                                                                                                                                                                                                                              453
                                                                                                                                                                                                                                                                                                                                                            513
                                                                                                                                                                                                                                                                                                                                                                                                                  157 ProSerCysAspProProTyrLeuAlaCysArgLeuLeuAlaAlaAlaCysIleCysLeu 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       334 GAGAAAGTGCAGCTGAAGAAGAGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGGCATAACTGTA 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||||||||||:::
|IleValThrLeulleTyrIleLeuThrAsnValAlaTyrTyrThrValLeuAsnIleSer 296
                                                                                                                                                                                                                                                                                                                        96
                                                                                                                                                                                                                                                                                                          394 ACCATCATTGGAGCAGGAATCTTCATCTCCTAAGGGGGGTGCTCCAGAACACGGGGCAGC
                                                                                                                                                                                                                                                                                                                                                                     TyrGlyMetSerLeulleValTrpAlaIleGlyGlyLeuPheSerValValGlyAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             154 GIGGGCAIGICICIGACCAICIGGACGGIGIGIGGGGICCIGICACIAITIGGAGCITIG
                                                                                                                                                                                                                                                                                                                                                                                                      TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITIGCAAGCICACAGCAATICIGATAATTATAGICCCIGGAGITATGCAGCTAATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGTCACCATTGGCTATGTGTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT
                                                                                                                                                              515
218
105
141
23
                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                        US-09-667-170A-440 (1-2239) x US-09-073-362-3 (1-515)
TELEX:

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 515 amino acid

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

INMEDIATE SOURCE:

IMMEDIATE SOURCE:

LEBRARY: GenBank

CLONE: 1665759

US-09-073-362-3
                                                                                                                                                        9.76e-113
1156.50
69.16%
46.68%
28.07%
                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            277
                                                                                                                                                                                                                                                                                                                                                                              11
                                                                                                                                                                                                                                                                                                                                                                                                                                                 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          994
                                                                                                                                                          No.:
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ờ ⁴8
                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 \overset{\triangleright}{o}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Пb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
1233
1114 GAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1414 AGGIGGCITTITATIGGGCIGGCAGITGCIGGGCIGATITATCITCGATACAATGCCCA 1473
                                                                                                                                                                                                                                                                                                                           ICCATGATTCATGCCACACACACTCCTCTACCAGCTGTTATTGTTTTTGCACCCTTTG 1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1474 GATAIGCAICGICCITICAAGGIGCCACIGIICAICCCAGCITIGIIITICCITCACAIGC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1594 ATCACTCTGACTGGAGTCCCTGCGTATTATCTC-----TTTATTATATGGGACAAGAAA 1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1648 CCCAGGTGGTTTAGAATAATGTCAGAGAAATAACCAGA---ACATTACAAATAATACTG 1704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ||| ::: ||| ::: ||| 477 ProLeuPheIleArgAsnValLeuAlaAlalleThrArgGlyThrGlnGlnLneuCysPhe 496
                                                                                                                                                317 SerTrpThrIleProlleAlaValAlaLeuSerCysPheGlyGlyLeuAsnAlaSerIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377 AlaLeulleTyrLeulleValGluAspValPheGlnLeulleAsnTyrPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     357 SerMetileHisileGluArgPheThrProlleProAlaLeuLeuPheAsnCysThrMet
                                                                                                                                                                                                                                                                                                                                                                                                                                 1354 ACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         397 TyrTrpPhePheValGlyLeuSerValValGlyGlnLeuTyrLeuArgTrpLySGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1534 CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC
                                                                                                         TCATTAGCAGTTCCGATCTTTGTTGCCCTCTTCCTGCTTTGGCTCCATGAACGGTGTGTG
                                                                                                                                                                                                                     TITGCTGTCTCCCAGGTTATTCTAGGTCTCCGAGAGGGTCACCTTCCAGAAATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/09243920;
Patent No. 5981242;
GRNEAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Corley, Neil C.
TITLE OF INVENTION: AMINO ACID PERMEASE HOMOLOG;
NUMBER OF SEQUENCES: 3
ACORRESPONDENCE ADDRESS:
ADDRESSED: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SYSTEM: DOS
FastSEQ for Windows Version
```

1293

```
ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 1113
                                                                                                                                                                                                                                               1174 TCATTAGCAGTICCGAICTTIGTIGCCCTCTCCTTGGCTCCATGAACGGTGGTGT 1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1474 GATAIGCAICGICCITICAAGGIGCCACTGITCAICCCAGCITIGITITICCITCACAIGC 1533
                    ACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1354 ACAATGATAATGCTCTTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC 1413
                                                                                                                                                                                                                                                                                                                                                                                                        1294 TCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTG 1353
                                    1534 CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1594 ATCACTCTGACTGGAGTCCCTGCGTATTATCTC-----TTTATTATATGGGACAAGAAA 1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1648 CCCAGGTGGTTTAGAATAATGTCAGAAAATAACCAGA---ACATTACAAATAATACTG 1704
                                                                                                                                                                                                                                                                           317 SerTrpThr1leProlleAlaValAlaLeuSerCysPheGlyGlyLeuAsnAlaSer11e 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            417 LysArgProArgProLeuLysLeuServalPhePheProllevalPheCyslleCysSer 436
                                                                                                                                                                                               337 PheAlaSerSerArgLeuPhePheValGlySerArgGluGlyHisLeuProAspLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           377 AlaLeulleTyrLeulleValGluAspValPheGlnLeulleAsnTyrPheSerPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  397 TyxTrpPhePheValGlyLeuSerValValGlyGlnLeuTyrLeuAxgTrpLySGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ||| |||:::||||||||| |||:::::
457 IleAlaLeuSerGlyValProPheTyrPheMetGlyValTyrLeuProGluSerArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |||||||||::: |||:::||||||||||||||||:::||| :::||| 277 IleValThrLeulleTyrIleLeuThrAsnValAlaTyrTyrThrValLeuAsnIleSer
                                                                                                                                                                       1114 GAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC
                                                                                                                                                                                                                                                                                                                              TITGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGGGGTCACCTTCCAGAAATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                               1414 AGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Hilman, Jennifer L.
APPLICANT: Yue, Henry
APPLICANT: Corley, Neil C.
TITLE OF INVENTION: AMINO ACID PERWEASE HOMOLOG
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS: ADDRESSES: ADDRESSES: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1705 GAAGTIGIACCAGAAGAI 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            497 CysValLeuThrGluLeuAsp 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/09073362
Patent No. 5942399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 3174 Por
CITY: Palo Alto
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                              1054
                                                                                                                                                                                                                                                                                                                              1234
                  994
                                                  g
                                                                                                                            рp
                                                                                                                                                                     \overset{\circ}{\circ}
                                                                                                                                                                                                       g
                                                                                            \delta
                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGCAGCTACTGCTGTGTATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT 693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    694 AITCAAIGIGAAAICCCIGAACIIGCGAICAAGCICAITACAGCIGIGGGCAIAACIGIA 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   157 ProSerCysAspProProTyrLeuAlaCysArgLeuLeuAlaAlaAlaCysIleCysLeu 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              334 GAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC 633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 237 SerLeuAlaLeuTyrSerAlaLeuPheSerTyrSerGlyTrpAspThrLeuAsnPheVal 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      77 TyrGlyMetSerLeulleValTrpAlalleGlyGlyLeuPheSerValValGlyAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97 CysTyrAlaGluLeuGlyThrThrIleThrLysSerGlyAlaSerTyrAlaTyrIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GIGGGCATGTCTCTGACCATCTGGACGGTGTGGGGGTCCTGTCACTATTTGGAGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITIGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     394 ACCATCATTGGAGCAGGAATCTTCATCTCCTAAGGGCGTGCTCCAGAACACGGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC
                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-667-170A-440 (1-2239) x US-09-243-920-3 (1-515)
ATTORNEY/AGENT INFORNATION:
NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,132
REFERENCE/DOCKET NUMBER: 39,132
REFERENCE/DOCKET NUMBER: 9F-0514 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHRACATERISTICS:
LENGTH: 515 amino acids
TYPE: amino acid
TYPE: amino acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels:
                                                                                                                                                                                                                                                                                                                                                                                                9.76e-113
1156.50
69.16%
46.68%
28.07%
                                                                                                                                                                                                                                                         TOPOLOGY: linear IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                LIBRARY: GenBa
CLONE: 1665759
                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                      US-09-243-920-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
```

ò

g ð

ò

ð

à g ð à d g

```
CCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAAGACGCCTTTTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1684 AGAACATTACAAATAATA---CTGGAAGTTGTACCAGAAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481 ArgTyrLeuGlnValLeuCysMetSerValAlaAlaGluMetAsp 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/09243920
Patent No. 5581242
GENERAL INFORMATION:
APPLICANT: Yue, Henry
APPLICANT: Yue, Henry
TITLE OF INVENTION: AMINO ACID PERMEASE HOMOLOG
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Incyte Pharmaceuticals, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-243-920-1
                                                                                                                                                                               1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1390
                                         g
                                                                      ò
                                                                                           g
                                                                                                                         \delta
                                                                                                                                                 셤
                                                                                                                                                                              \delta
                                                                                                                                                                                                       d
                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGGTGTGTGGG 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGGICATTACACATATATTTIGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTC 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141 AsnTyrMetValGlnProLeuPheProSerCysPheAlaProTyrAlaAlaSerArgLeu 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      310 GGAAGAGGCCTTTTCAGGAAGAGAGAAGTGCAGCTGAAGAGAAAGTCACTTTACTG 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         610 TGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGA 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             670 CGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTC 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   730 ATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGC 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    370 AGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCCTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           790 GCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-667-170A-440 (1-2239) x US-09-073-362-1 (1-511)
                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
OPERATING SYSTEM: DOS
SOTWARE: PESISESO for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/073,362
                                                                                                                                                               PF-0514 US
                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Cerrone, Michael C
REGISTATION NUMBER: 39,132
REFERENCE/DOCKET NUMBER: PF-O
TELECOMMUNICATION INFORMATION:
TELEFHONE: 650-855-0555
TELEFAX: 650-845-4166
TELEX.
                                                                                                                                                                                                                                                                                                                                                                                             4.15e-110
1131.50
68.00%
45.05%
27.46%
                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 511 amino acids
TYPE: amino acids
STRANDEDNESS: single
                                                    FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: ESOGTUT02
                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                         : 2667831
                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                      US-09-073-362-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                           CLONE
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                  No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

```
1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1330 GCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGT 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1683
                                                                                                                                                                                                                                GGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAAACCATTCCC 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1450 AITIAICTICGAIACAAAIGCCCAGAIAIGCAICCTICTITICAAGGIGCCACIGIICAIC 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
201 AlaGlyIleValArgLeuGlyGlnGlyAlaSerThrHisPheGluAsnSerPheGluGly
                                                                                                                                        SerSerPheAlaValGlyAspIleAlaLeuAlaLeuTyrSerAlaLeuPheSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 AlaAspGlnIlePheGlyIlePheAsnTrpIleIleProLeuSerValAlaLeuSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTTTGAATTTCCTCAGTTTTGCCAGGTGCCTTTTTATTGGGCTGGCAGTTGCTGGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 441 IleAsnSerLeulleGlyIleAlaIleAlaLeuSerGlyLeuProPheTyrPheLeulle
                                                                                                                                                                                                                                                                241 GlyTrpAspThrLeuAsnTyrValThrGluGluIleLysAsnProGluArgAsnLeuPro
                                                                                                                                                                                                                                                                                                                                                           CTIGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||||||| :::|||
321 PheGlyGlyLeuAsnAlaSerIleValAlaAlaSerArgLeuPhePheValGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1270 GAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361 SerLeubeupheAsnGlylleMetAlaLeulleTyrLeuCysValGluAspllePheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :::|||||||||||:::|||
401 LeufyrLeuArgTrpLysGluProAspArgProArgProLeuLysLeuSerValPhePhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1510 CCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1570 TTTAGTACAGGGATTGGCTTCGTCATCACTCTGGAGTCCCTGCGGTATTATCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1630 ATT----ATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAACC
                                                                                           910 AGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTTATTATGGAATGTATGCATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                     261 LeuSerlleGlylleSerMetProlleValThrIleIleTyrlleLeuThrAsnValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACTITIACGACCATTAATGCTGAGGAGCTGCTGTTTCAAATGCAGTGGCAGTGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1150 TCTGAGCGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1210 TTTGGCTCCATGAACGGTGGTGTTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461 ileArgValProGluHisLysArgProLeuTyrLeuArgArgIleValGlySerAlaThr
```

```
1150 TCTGAGCGGCTACTGGGAAATTTGTCATTAGCAGTTCCGATCTTTGTTGCCCTCTCTCCTGC 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1210 TTTGGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGA 1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1270 GAGGGICACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCA 1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1330 GCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGT 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1450 ATTTATCTTCGATACAAATGCCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATC 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1570 TITAGTACAGGGATIGGCTICGTCATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTT 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .630 AIT-----ATAIGGGACAAGAAACCCAGGIGGITITAGAATAAIGICAGAGAAAATAACC 1683
                                             910 AGAGAITCAAGIAITACGCGGITGCCACIGGCITITIAITAIGGAAIGIAIGCAIAIGCI 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerLeuLeuPheAsnGly11eMetAlaLeuileTyrLeuCysValGluAspilePheGln 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        730 ATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGC
789
                                                                                                                                                                    850 CCTGGAGITATGCAGCTAATTAAAGGTCAAACGCAGAAACTTTAAAGACGCCTTTTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 AlaAspGlnIlePheGlyIlePheAsnTrpIleIleProLeuSerValAlaLeuSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321 PheGlyGlyLeuAsnAlaSerIleValAlaAlaSerArgLeuPhePheValGlySerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    341 GluGlyHisLeuProAspAlaIleCysMetIleHisValGluArgPheThrProValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTITIGAATITCCTCAGTITIGCCAGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTG
                                                                                                                   :::|||
181 ThrLeuValdInAspIlePheThrTyrAlaLysValLeuAlaLeuIleAlaVallleVal
                                                                                                                                                                                       201 AlaGlyIleValArgLeuGlyGlnGlyAlaSerThrHisPheGluAsnSerPheGluGly
                                                                                                                                                                                                                                                                 SerSerPheAlaValGlyAspIleAlaLeuAlaLeuTyrSerAlaLeuPheSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                             1090 IACTTTACGACCATTAATGCTGAGGAGCTGCTTTCAAATGCAGTGGCAGTGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1510 CCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              790 GCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATAGTC
                                                                                                                                                                                                                                                                                                                                                                                       CTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAATGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1684 AGAACATTACAAATAATA---CTGGAAGTTGTACCAGAAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481 ArgTyrLeuGlnValLeuCysMetSerValAlaAlaGluMetAsp 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-489-847-255
; Sequence 255, Application US/09489847
; Patent No. 6476195
                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                                                                                     1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1390
                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                   5
C
                                                                                            ò
                                                                                                                       임
                                                                                                                                                                 ò
                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81 LeupheSerValPheGlyAlaLeuCysTyrAlaGluLeuGlyThrThrIleLysLysSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       370 AGGGGAGICTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCTCAAG 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41 AsnGlyValCysLeulleValGlyAsnMetIleGlySerGlyIlePheValSerProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             310 GGAAGAGGCCTTTTCAGGAAGAGAGAAAAGTGCAGCTGAAGAGAAAGTCACTTTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130 GGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGGTGTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                490 GICCIGICACIAITIGGAGCIIIGICIIAIGCIGAAITIGGGAACAACIAIAAAGAAAICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGGICATTACACATATATATTGGAAGICTTTGGTCCATTACCAGCTTTTGTACGAGIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 GlyValLeuIleTyrSerAlaSerPheGlyLeuSerLeuValIleTrpAlaValGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               511
214
109
149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-667-170A-440 (1-2239) x US-09-243-920-1 (1-511)
                                                                                                                                                                  7.0
                                                                    ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FRASESC for Windows Version 2.(
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/243,920
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                    _{\rm ns}
                                                                                                                                                                                                                                                                                                                            NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,132
REFERINGE DOCKET NUMBER: PF-0514
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/073,362
FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.15e-110
1131.50
68.00%
45.05%
27.46%
': 3174 Porter Drive
Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 511 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 650-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LIBRARY: ESOGTUT02
CLONE: 2667831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                  CITY: Pa
STATE: C
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-243-920-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  210
                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
```

g

δ g ò D ò g

δ

g ð 셤

ò

1089

280

220

240

909

ø

```
370
140
87
102
27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (370)
OTHER INFORMATION: Xaa equals stop translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TILE REPERENCE: PZ031P1
CURRENT APPLICATION NUMBER: US/09/489,847
CURRENT FILING DATE: 2000-01-24
CURRENT FILING DATE: 2000-01-24
EARLIER APPLICATION NUMBER: PCT/US99/17130
EARLIER FILING DATE: 1999-07-29
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER APPLICATION NUMBER: 60/095,486
EARLIER PPLING DATE: 1998-08-05
EARLIER FILING DATE: 1998-08-05
EARLIER FILING DATE: 1998-08-12
EARLIER FILING DATE: 1998-08-05
EARLIER APPLICATION NUMBER: 60/095,454
EARLIER APPLICATION NUMBER: 60/095,455
EARLIER FILING DATE: 1998-08-06
SOFTWARE: PALENTING VOICE: 2.0
SEQ ID NOS: 376
SEQ ID NOS: 376
SEQ ID NOS: 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 127, Application US/09489847
Patent No. 6476195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       730.00
63.76%
39.33%
17.72%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-09-489-847-127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-489-847-127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                                                   201
                                                              1327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                          g
                                                                                                                                 õ
                                                                                                                                                                              g
                                                                                                                                                                                                                                                              g
                                                          à
                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                  윤
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   967 GCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAACCATT 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1087 GCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGTTTCAAATGCAGTGGCAGTGACC 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCTTTGGCTCCATGAACGGTGGTGTTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCT 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITICIGAGGGGCTACTGGGAAATTICICATTAGCAGTICCGATCTTTGTTGCCCTCTCC 1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1267 CGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTA 1326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  727 CICATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGG 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  787 AGCGCCCGGAICCAGAITITCTIAACCITITGCAAGCICACAGCAAITCTGAIAAITAIA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    847 GICCCIGGAGITAIGCAGCIAATTAAAGGICAAACGCAGAACITIAAAGACGCCTTTICA 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaTyrTyrThrValLeuAspMetArgAspIleLeuAlaSerAspAlaValAlaValThr 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 GlySerSerPheAlaValGlyAspileAlaLeuAlaLeuTyrSerAlaLeuPheSerTyr 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-667-170A-440 (1-2239) x US-09-489-847-255 (1-352)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
        APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
FILE REFERENCE: PZ031P1
                                                              CURRENT APPLICATION NUMBER: US/09/489,847

CURRENT FILING DATE: 2000-01-24

BARLIER APPLICATION NUMBER: PCT/US99/17130

EARLIER FILING DATE: 1999-07-29

EARLIER FILING DATE: 1998-07-30

EARLIER APPLICATION NUMBER: 60/095,486

EARLIER FILING DATE: 1998-08-05

EARLIER FILING DATE: 1998-08-05

EARLIER FILING DATE: 1998-08-05

EARLIER PELING DATE: 1998-08-05

EARLIER PELING DATE: 1998-08-05

EARLIER PILING DATE: 1998-08-06

EARLIER PILING DATE: 1998-08-06

EARLIER PILING DATE: 1998-08-06

EARLIER FILING DATE: 1998-08-06

EARLIER FILING DATE: 1998-08-06

EARLIER PILING DATE: 1998-08-06

NUMBER OF SEQ ID NOS: 376

COFTWARE: PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.71e-69
741.50
66.67%
41.67%
18.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-489-847-255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
```

δλ g ò ò a ò g ò qq ò g

ò

DP

ò

à

```
CCAGCTGTTATTGTTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGAC 1386
                                                                                                                                                                                                                                                                                    1447 CIGATITATOTICGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTC 1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1627 TITATT-----ATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 IleileArgValProGluHisLysArgProLeuTyrLeuArgArgIleValGlySerAla 320
                                                                                                                                                                                                                                                                                                                                                                                                                                  1507 ATCCCAGCITIGITITCCTICACATGCTCTTCATGGTTGCCCTTTCCCTCTATTCGGAC
                                              |||::::::::
ProSerLeuLeuPheAsnGlylleMetAlaLeuIleTyrLeuCysValGluAspIlePhe
                                                                                                                                                                                        221 GlnLeuIleAsnTyrTyrSerPheSerTyrTrpPhePheValGlyLeuSerIleValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      281 ThrlleAsnSerLeulleGly11eAlalleAlaLeuSerGlyLeuProPheTyrPheLeu
                                                                                                                                          1387 AGICTITIGAATITCCTCAGITITGCCAGGIGGCTTTTTTATTGGGCTGGCAGTTGCTGGG
                                                                                                                                                                                                                                                                                                                                                  241 GlnLeufyrLeuArgTrpLysGluProAspArgProArgProLeuLysLeuServalPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261 PhebrolleValPheCysLeuCysThrIlePheLeuValAlaValProLeuTyrSerAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1567 CCATTTAGTACAGGGATTGGCTTCGTCATCACTGGAGTCCCTGCGTATTATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1681 ACCAGAACATTACAAATAATA---CTGGAAGTTGTACCAGAAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321 ThrArgTyrLeuGlnValLeuCysMetSerValAlaAlaGluMetAsp 336
```

ð d ò

d à

ð

염

g

ਨੇ

à

B

ò

엄

ò g õ d ö à d ò d ਨੇ

ò

à PP 8

```
1009 AACCCIGAAAAACCATICCCCTIGCAATAIGIATAICCATGGCCATIGICACCATIGGC 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63 ValPheValGlyLeuSerCysPheGlySerValAsnGlySerLeuPheThrSerSerArg 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1189 ATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23 TyrValLeuThrAsnLeuAlaTyrPheThrThrLeuSerThrAsnGlnMetLeuThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1129 AATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43 GlualaValAlaValAspPheGlyAsnTyrHisLeuGlyValMetSerTrpllellePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1069 DATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCA
                                                                                                         GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN TUMOR-ASSOCIATED MEMBRANE PROTEIN
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
449
400
000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-667-170A-440 (1-2239) x US-08-825-781-3 (1-241)
                                                                                                                                                                                                                                                                                                                   ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NOMBER: US/08/825,781
FILING DATE: Herewith
CLASSIFICATION: 514
                                                                                                                                                                                                                  ADDRESSEE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \overline{\mathbf{u}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: 9F-0;
TELEPHONE: 415-855-0555
                                                                      Sequence 3, Application US/08825781
Patent No. 5843727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.45e-56
621.00
68.49%
47.90%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 415-855-059
TELEFAX: 415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: sing
TOPOLOGY: linear
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LIBRARY: GenBank
CLONE: 392990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                  STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                  JS-08-825-781-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                   TAIGCATAIGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAA 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                AAAACCATICCCCTIGCAATAIGTAATACCATGGCCATTGTCACCATTGGCTATGTGTG 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAAAIGIGGCCIACTITACGACCATTAAIGCTGAGGAGCTGCTGTTCAAAIGCAGTG 1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTT 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GITGCGICTCGAGAGGGICACCTICCAGAAAICCTCTCCAIGAITCAIGICGCAAGCAC 1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGA 1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACCTCGACAGTCTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCA 1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1438 GTTGCTGGGCTGATTTATCTTCGATACAAATGCCCCAGATATGCATCGTCCTTTCAAGGTG 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1498 CCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTC 1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATICGGACCCATITAGIACAGGGAITGGCITCGICATCACICIGAGIGGAGICCCIGCG 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATTATCTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAA 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1678 ATAACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACT 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            128
                                          718 GCGAICAAGCICATIACAGCIGIGGGCAIAACIGIAGIGAIGGICCIAAAIAGCAIGAGI 777
                                                                                                                   GICAGCIGGAGCGCCCGGAICCAGAITTICITAACCITTIGCAAGCTCACAGGAAITCIG 837
                                                                                                                                                                                             338 ATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGAC 897
                                                                                                                                                                                                                                                                      GCCTTTTCAGGAAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATAGAATG 957
                                                                                                                                                                                                                                                                                                                                                                           229 AspilePheGlnLeuileAsnIyrTyrSerPheSerTyrTrpPhePheValGlyLeuSer 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |||||||||
TyrSerAspThr11eAnSerLeu11eG1yI1eAla11eAlaLeuSerG1yLeuProPhe 308
                                                                                                                                             49 AlaValIleValAlaGlylleValArgLeuGlyGlnGlyAlaSerThrHisPheGluAsn 68
                                                                                                                                                                                                                                                                                                     SerPheGluGlySerSerPheAlaValGlyAspileAlaLeuAlaLeuTyrSerAlaLeu 88
                                                                  109 ArgAsnLeuProLeuSerileGlylleSerMetProlleValThrllelleTyrileLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ||||||::||||::::|||
|ThrProValProSerLeuLeuPheAsnGlyIleMetAlaLeuIleTyrLeuCysValGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCTCTCCTGCTTTGGCTCCATGAACGGTGTGTTTTGCTGTCTCCAGGTTATTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1738 AATGGACTTGAGATCTTGGCAATCTGCCCAAGGGGAACACAAAAT 1783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ::: ||||||||| :::
315 Val-ProGluHisLysArg------ProLeuTyrLeuArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-667-170A-440 (1-2239) x US-09-489-847-127 (1-370)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrPheLeuIlelle----
                                                                                                                                                                                                                                                                                                                                                       958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         289
                                                                                                                     778
                                                                                                                                                                                                                                                                          868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        309
                                                                                                                                                                                                                                                                                                                 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                326
                                                                                                                                                                                                                                                                                                                                                                                                                                  1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1138
```

1188

62

42

```
1369 ITCTCTGGAGACCTCGACAGICTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTATT 1428
1249 ITATICIAIGITGCGICTCGAGAGGGICACCTICCAGAAAICCTCCCAIGAITCAIGTC 1308
                                                                                             1309 CGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTC 1368
                                                                                                                                                                                                                                                                                                1429 GGGCTGGCAGTTGCTGGGCTGAITTATCTTCGATACAAATGCCCAGATATGCATCGTCCT 1488
                                                                                                                                                                                                                                                                                                                                                                                                   1489 ITCAAGGIGCCACIGIICCAICCCAGCIIIGIIIICCIIICACAIGCCICIICAIGGIIGCC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1549 CTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGA 1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1609 GTCCCTGCGTATTATCTCTTTATTATTATGGGACAAGAAACCCAGGTGGTTTAGAATAATG 1668
                                                                                                                        83 LeuphepheValGlySerArgGluGlyHisLeuProSerIleLeuSerWetIleHisPro 102
                                                                                                                                                                                                                                                                                                                              163 IleLysValAsnLeuAlaLeuProValPhePheIleLeuAlaCysLeuPheLeuIleAla 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 203 LeubrovalfyrPhePheGlyValTrpTrpLysAsnLysProLysTrpIleLeuGlnVal 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 183 ValšerPheTrpLysThrProLeuGluCysGlyIleGlyPheAlaileIleLeuSerGly 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1669 TCAGAGAAATAACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAA 1722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       223 IlePheSerValThrValLeuCysGlnLysLeuMetGlnValValProGlnGlu 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: HUMAN TUMOR-ASSOCIATED MEMBRANE PROTEIN NUMBER OF SECUENCES: 4
CORRESPONDENCE DEDESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
SOFRATING SYSTEM:
SOFRWARE: RastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PF-0262 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/825,781
FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY AGENT.
NAME: Billings, Lucy J.
REGIGTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-OTELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/08825781
Patent No. 5843727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Hilman, Jennifer L. APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN TUMOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 241 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 3174 Por
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CA
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-825-781-4
                                                                                                                                                                                                                                                                                                                                              셤
                                          g
                                                                                             ò
                                                                                                                                        g
                                                                                                                                                                                             à
                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                              ò
```

```
Sequence 5743, Application US/09107532A
Patent No. 6583275
GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm and David Bush
APPLICANT: Lynn A Doucette-Stamm and David Sush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
FITTLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1189 ATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTGTTCTCCAGG 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1249 TTATTCTATGTTGCGTCTCGAGAGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTC 1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1369 TICTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTTATT 1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1489 TTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1549 CITICCCICIATICGGACCCATITAGIACAGGGAITGGCTICGICATCACICIGACTGGA 1608
                                                                                                                                                                                                                                                                                                                                                                                                       1009 AACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACTGGC 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1129 AATGCAGTGGCCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCG 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1309 CGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTC 1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1609 GTCCCTGCGTATTATCATTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATG 1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 143 AlaLeuAlaIleIleGlyMetIleTrpLeuArgHisArgLysProGluLeuGluArgPro 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    163 IleLysValAsnLeuAlaLeuProValPhePheIleLeuAlaCysLeuPheLeuIleAla 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               183 ValSerPheTrpLysThrProValGluCysGlyileGlyPheThrileIleLeuSerGly 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            203 LeuProValTyrPhePheGlyValTrpTrpLysAsnLysProLysTrpLeuLeuGlnGly 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                   23 TyrValLeuThrAsnLeuAlaTyrPheThrThrLeuSerThrGluGlnMetLeuSerSer 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 ValPheValGlyLeuSerCysPheGlySerValAsnGlySerLeuPheThrSerSerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1429 GGGCTGGCAGTTGCTGGGCTGAFTTAFCTTCGATACAAATGCCCCAGATATGCATCGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1069 TAIGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGGTGGTGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        43 GlualavalalavalasppheGlyAsnTyrHisLeuGlyValMetSerTrpIleIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1669 TCAGAGAAAATAACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAA 1722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                       US-09-667-170A-440 (1-2239) x US-08-825-781-4 (1-241)
                                                                                                                                                                                        Length:
                                                                                                                                                                                                                                                                                Indels:
                                                                                                                                                                                   6.22e-56
615.00
68.07%
48.32%
STRANDEDNESS: single
                 TOPOLOGY: linear IMMEDIATE SOURCE:
                                                                    GenBank
                                                                                                                                                                                                                                                            Best Local Similarity:
                                                                                        181908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-107-532A-5743
                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                            Alignment Scores:
                                                                    LIBRARY:
                                                                                                                 US-08-825-781-4
                                                                                          CLONE:
                                                                                                                                                                                                                                                                                Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               슝
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

768

888

948

```
949 TAIGGAAIGTAIGCATAIGCIGGCIGGTTTTACCICAACTTTGTTACTGAAGAAGTAGAA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1009 AACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGC 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1186 CCGAICTTTGTTGCCCTCTCTCTTTGGCTCCATGAACGGTGGTGTTTTGCTGTCTCC 1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1246 AGGITATICIAIGITGCGTCTCGAGAGGGTCACCTTCCA-----GAAATCCTCTCCATG 1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1300 AITCAIGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATG 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1534 CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC 1593
                                231 PheLeuGlySerLysAlaGlyGlyAlaPhedlnSerIleThrLeuValCysLysLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     829 GCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    271 PheProIleGlnAlaGlyGluAsnLeuSerPhePheSerAlaLeuGlyAlaGlyLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              311 LysProAlaLysAspLeuProLysAlalleSerLeuGlyllelleGlylleWetlleVal
        478 ACGGIGIGIGGGGICCIGICACIAITITGGAGCITIGICITAIGCIGAAITGGGAACAACI
                                                                                                            |||
| ::::::||||||
|158 IlebroGluThrGlyGlyMetIleLysTyrileGluArglleTyrGlyAsnThrAlaAla
                                                                                                                                                              TITGTACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCC
                                                                                                                                                                                                                                                                                                                                                       211 SerGlnSerMetilevalProvalAlavalThrAlaAlaValSerIleLeuLeuIleAsn
                                                                                                                                                                                                                                                                                                                                                                                             769 AGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               889 IIITAAAGACGCCTTTTCAGGAAGAGAIICAAGTATTACGCGGGTTGCCACTGGCTTTTTAT
                                                                                                                                                                                          |||:::
178 PheLeuclyTrpAlaGlnValValIleTyrPheProAlaAsnValAlaAlaLeuSer
                                                                                                                                                                                                                                        658 CTGGCATTTGGACGCTACATTCTGGAACCATTTTTTTTTCAATGTGAAATCCCTGAACTT
                                                                                                                                                                                                                                                                                --GlyLeu
                                                                                                                                                                                                                                                                                                                   718 GCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA------GTGATGGTCCTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291 AlaThrMetPheAlaTyrAspGlyTrpIleHisValGlyAsnIleSerGlyGluLeuLys
                                                                                    538 ATAAAGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1360 ATAATGCTCTTCTCTGGAGACCTCGACATTTTGAATTTCCTCAGTTTTGCCAGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1069 TATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerAsnAlaAlaSerAspValAlaLysMetIlePheGiyGlyPheGlyGlyArgLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTITITIATIGGGCTGGCAGTIGCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1480 CATCGICCITICAAGGIGCCACIG----TICAICCCAGCITIGITITICCTICACAIGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1129 AATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC---TCATTAGCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        471 PheArgProTyrLysValProMetTyrProPheileProLeuValAlaileileGlyGly
                                                                                                                                                                                                                                                                            198 IleIlePhedlyThrGlnPheValAsnLeuPhe----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ::
                                                                                                                                                              298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1420
                                                                                  à
                                                                                                                        셤
                                                                                                                                                              ò
                                                                                                                                                                                              g
                                                                                                                                                                                                                                      \overset{\circ}{2}
                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    298 GACGCCTTTTCAGGAAGAGACGCCTTTTCAGGAAGAGAGAAAAGTGCAGCTGAAGAGGAAA 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---TCAGGAAGA 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  358 GTCACTTTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTC 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              118 ATCTCTCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGG 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ::: ::: |||||||||||||| 78 GluGluTyrGlnAlaThrProValLysGluValLysIleGluAsnGluLeuLysArgThr 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         214 GGTTACCTGCAGGGAAATGTTAACGGGAGGCTGCCTTCCCTGGGCAACAAGGAGCCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            58 HisProLysSerPheLeuTyrPheTrpAspTrpLeuTrpTyrGluArgGlyGlnGlyMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           525
1133
1106
2224
229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-667-170A-440 (1-2239) x US-09-107-532A-5743 (1-525)
                                          THERAPEUTICS CORPORATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                              SOFTWARE: ASCII
CURRENT APPLICATION DATA:
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
PLING DATE: 10-Jun-1998
PRIOR APPLICATION DATA:
FILING DATE: 14 May 1998
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature;

LOCATION: (B) LOCATION 1...525

SEQUENCE DESCRIPTION: SEQ ID NO: 5743:

US-09-107-532A-5743
                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Enterococcus faecium
                                                                                                                                                                        MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: PC
                                                                                                                                                                                                                OPERATING SYSTEM: <Unknown>
                    CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPE
STREET: 100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (781)893-5007
TELEPRA: (781)893-8277
INFORMATION FOR SEQ ID NO: 5743:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 525 amino acids TYPE: amino acid
  SEQUENCES: 7310
                                                                            CITY: Waltham
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.33e-47
537.50
48.58%
27.03%
13.05%
                                                                                                                                    ZIP: 02354
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         274 GGGCAGGACGCCTTT-
                                                                                                                COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
```

1185

370

330

1479

ð

à 유

```
NUCLBIC ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPBUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1588 TICGICATCACTCTGACTGGAGICCCTGCGTATTAICTCTTTAIT-----ATAIGGGAC 1641
                                                                                                                                                                                                                                               1348 CCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGT 1407
                                                                                                                                                                                                                                                                                                                                     1408 TTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAAA 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1528 ACATGCCTCTTCATGGTTGCCCTTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGC 1587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1642 AAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAACCAGAACATTACAAATAATA 1701
                                                                      1228 GGTGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAA 1287
                                                                                                                                                          1288 ATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCAC 1347
                                                                                                                                                                                                                                                                                                                                                                                                                            1468 TGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTC 1527
                                                                                                                                                                                                                                                                                    101 IleMetalaLeuIleTyrLeuCysValGluAspIlePheGlnLeuIleAsnTyrTyrSer 120
                                                                                                                                                                                                                                                                                                                                                               161 CysThrIlePheLeuValAlaValProLeuTyrSerAspThrIleAsnSerLeuIleGly 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81 AlaileCysMetileHisValGluArgPheThrProValProSerLeuLeuPheAsnGly 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 GluProAspArgProArgProLeuLysLeuSerValPhePheProlleValPheCysLeu 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 IleAlaIleAlaLeuSerGlyLeuProPheTyrPheLeuIleIleArgValProGluHis 200
61 SerIleValAlaAlaSerArgLeuPhePheValGlySerArgGluGlyHisLeuProAsp 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4001, Application US/09107532A
Setent No. 6581275
GENERAL INFORMATION:
APPLICANT: LYND A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/107,532A FILING DATE: 30-Jun-1998 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1702 --- CTGGAAGTTGTACCAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: GTC-012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221 CysMetServalAlaAlaGluMetAsp 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/085,598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 14 May 1998
APPLICATION UNMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER; PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: <Unknown> SOFTWARE: ASCII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: ASCII
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 7310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: Massachusetts
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Waltham
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-107-532A-4001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                              B
                                                                                                                                                                                                  d
                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1048 ATGGCCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAAT 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1168 AATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGT 1227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1108 GCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGGGGCTACTGGGA 1167
  Sequence 1, Application US/08825781
Sequence 1, Application US/08825781
Patent No. 5843727
GENERAL INPORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN TUMOR-ASSOCIATED MEMBRANE PROTEIN
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               245
102
52
72
                                                                      1594 ATCACTCTGACTGGAGTCCCTGCGTAT -- TATCTC 1626
                                                                                             Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-667-170A-440 (1-2239) x US-08-825-781-1 (1-245)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastGED for Windows Version 2.0 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PF-0262 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Billings, Lucy J. REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-TELECOMMUNICATION INFORMATION: TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                3174 Porter Drive
Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .09e-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 245 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  524.50
67.25%
44.54%
12.73%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 415-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PANCTUT02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2236771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LIBRARY:
                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-825-781-1
                                                                                                                                                                                  US-08-825-781-1
                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                          RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
```

```
SEE: Pennie & Edmonds
: 1155 Avenue of the Americas
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patent In Release #1.24 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/132,990A FILING DATE: 07-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US93/05569 FILING DATE: 11-UNN-1993
PRIOR APPLICATION DATA: APPLICATION NUMBER: 07/899,075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATE:
APPLICATION NUMBER: 07/627,950
FILING DATE: 14-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/08132990A Patent No. 5834589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08/084,729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLIANCE DATE: 07-OCI-1222
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 11-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 29-JUN-1
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-132-990A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY:
                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                          à
                                                                            임
                                                                                                                  ò
                                                                                                                                                     d
                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      994 ACTGAAGAAGTAGAAAACCCTGAAAAACCATTGCCCTTGCAATATGTATATCCATGGCC 1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            577 GTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGCCCT 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95 AlaTyrGlyLysLeuProSerPheLeuLeuGlyTrpAlaGlnSerLeuIleTyrPhePro 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       637 GCAGCTACTGCTGTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTATT 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       817 TGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGT 876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             877 CAAACGCAGAACTITTAAAGACGCCTTTTCAGGAAGAGAT---TCAAGTATTACGCGGTTG 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   191 ThrValGinLeuPhe---ProIleGluAlaGlyLysAspValThrPheValGluGlyLeu 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          210 SerSeralaLeuLeuAlaThrLeuPheAlaTyrAspGiyTrpLeuGlyValGlyAlaMet 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                397 ATCATTGGAGCAGGAATCTTCATCTCCTAAGGGCGTGCTCCAGAACACGGGCAGGGGTG 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         457 GGCAIGICTCTGACCATCTGGACGGTGTGTGGGGGTCCTGTCACTATTTGGAGCTTTGTCT 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 517 TATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTTGGAA 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           115 AlaAsnileAlaAlaLeuSerileilePheAlaThrGlnLeuThrAsnLeuLeuGlnLeu 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               697 CAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCCATAACTGTAGTG 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            757 ATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACCTTT 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                152 ---GlyLeuAsnLeuLeuGlyThrLysValGlyAlaSerValGlnSerValThrLeuIle 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      337 AAAGTGCAGCTGAAGAAGAAAGTCACTTTACTGAGGGAAGTCTCCATTATCATTGGCACC 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              :::::||| |||:::
55 SerLeuThrLeuLeuAlaTrpLeuLeuGlyGlyPheLeuThrIleCysAlaGlyLeuThr 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-667-170A-440 (1-2239) x US-09-107-532A-4001 (1-417)
                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...417
SEQUENCE DESCRIPTION: SEQ ID NO: 4001:
                                                                                                                                                                       ORIGINAL SOURCE:
ORGANISM: Enterococcus faecium
TELEPHONE: (781)893-5007
                                                                            LENGTH: 417 amino acids TYPE: amino acid
                  TELEFAX: (781) 893-8277
INFORMATION FOR SEQ ID NO: 4001:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                            3.94e-41
475.50
50.76%
30.46%
                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                          US-09-107-532A-4001
                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                               FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                                                                                                    ..
No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
1054 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGGCCTACTTTACGACCATTAATGCTGAG 1113
                                                                                                                                                                                                                                          1114 GAGCTGCTTCCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC 1173
                                                                                                                                                                                                                                                                                                                                                                                                       1174 ---TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGT 1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1231 GTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGGGGTCACCTTCCAGAAATC 1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1291 CICICCARGATICALGICGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCT 1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1351 TIGACAATG-----AIAAIGCICITCICIGGAGACTCGACAGICTITIGAAITICCIC 1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1405 AGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATAC 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                      290 GlyGlyLysLeuValThrIleGlyIleLeuIleSerValTyrGlyAlaLeuAsnGlyTyr 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          230 AlaArgGluMetLysArgProGluLysAspLeuProLysAlaIleIleLeuGlyLeuSer 249
                                                                                                                               250 PheValThrValValTyrLeuLeulleAsnPheValPheLeuLysThrLeuProlleAsp 269
                                                                                                                                                                                                                                                                                                 310 ThrLeuThrGlylleArgValProTyrAlaMetAlaLeuGluAspAspLeuProPheSer 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          330 LysGlnLeuThrAsnLeuSerLysLysPheThrValProTyrValProAlaValPheGln 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MERCHLO, DANIEL APPLICANT: YOSHIMOTO, TAKAYUKI TITLE OF INVENTION: Human Retrovirus Receptor and DNA Coding Therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1465 AAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTC 1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                390 LysalaProGluLeuProArgProTyrGlnValProLeuTyr 403
```

```
NAME: Livnat, Shmuel
REGISTRATION NUMBER: 33,949
REFERENCE/DOCKET NUMBER: MERUBLO=1
TELECOMUNICATION INFORMATION:
TELEPHONE: 202 628-5197
INFORMATION FOR SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Release #1.24 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEE: Browdy and Neimark: 419 Seventh Street, N.W. Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCT-US92-09382-8; Sequence 8, Application PC/TUS9209382; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1456 CITCGAIACAAA 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     430 LeuargryrGln 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19921213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                     949 TATGGAATG--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY:
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                            염
                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                           à
                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101 SerfyrValThrValGlyGluLeuTrpAlaPheileThrGlyTrpAsnLeuileLeuSer 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           700 TGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATG 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         331 AGAGAGAAAGIGCAGCIGAAGAGAAAGICACITIACIGAGGGGAGICICCAITAICAIT 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           568 ATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTC--- 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----TTTATTCAA 699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       760 GTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGC 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          177 GlyLeuLeuThrLeuGlyValLysGluSerAlaMetValAsnLysIlePheThrCysIle 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 820 AAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAA 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       880 ACGCAGAACTTTAAA----- 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            214 VallysAsnTrpGlnLeuThrGluGluAspPheGlyAsnThrSerGlyArgLeuCysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 895 -----GACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTAT 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      391 GGCACCATCATTGGAGCAGGAATCTTCATCTTCCTAAGGGCGTGCTCCAGAACACGGGC 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              451 AGCGTGGGCATGTCTCTGACCATC---TGGACGGTGTGTGGGGTCCTGTCACTATTTGGA 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      508 GCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATAT 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23 ArgGluGluThrArgLeuSerArgCysLeuAsnThrPheAspLeuValAlaLeuGlyVal 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141 GlyArgProIleGlyGluPheSerArgThrHisMetThrLeuAsnAlaProGlyValLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     625 ---ATAATACGCCCTGCAGCTACTGCT---GTGATATCCCTGGCATTTGGACGCTACATT
                                                                                                                                                                                                                                                                                                                                                  Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-667-170A-440 (1-2239) x US-08-132-990A-8 (1-629)
                                                                                                                                                                                                                                                                                                               Length:
Matches:
                                                      8105-004-999
                   NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 810
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864
                                                                                                                          TELEX: 66441 PENNIE
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                         4.24e-21
286.00
43.16%
24.29%
6.94%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           679 CTGGAACCATTT-----
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                  : 629 amino acids
amino acid
                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                          US-08-132-990A-8
                                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
1396 AATTTCCTCAGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTGATTTAT 1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1276 CACCTTCCAGAAATCCTCTCCAIGATTCAIGTCCGCAAGCACACTCCTCTACCAGCTGTT 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1336 ATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTG 1395
                                                                                                                                                                                                                                                                                                         1048 ATGGCCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAAT 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1108 GCTGAGGAGCTGCTGCTGCTATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGA 1167
                                                                                                                                                      988 TTTGTTACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1168 -------AATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGC 1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||::: ||| :::||| :::||| ||| 350 SerLeuLeuGlySerMetPheProMetProArgVallleTyrAlaMetAlaGluAspGly 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             370 LeuleuPheLysPheLeuAlaAsnValAsnAspArgThrLysThrProllelleAlaThr 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            410 AspLeuMetSerIleGlyThrLeuLeuAlaTyrSerLeuValAlaAlaCysValLeuVal 429
                                                                                                                                                                                           274 ThrThrGlyGluGluValLysAsnProGlnLysAlaIleProValGlyIleValAlaSer 293
                                                                                                                                                                                                                                                                                                                                                          -- TATGCATATGCTGGCTGGTTTTACCTCAAC 987
                                        312 MetProTyrPheCysLeuAspAsnAsnSerProLeuProAspAlaPheLysHisValGly 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1216 TCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: MERUELO, DANIEL
APPLICANT: YOSHIMOTO, TAKAYUKI
TITLE OF INVENTION: Human Retrovirus Receptor and DNA Coding
TITLE OF INVENTION: Therefor
NUMBER OF SEQUENCES: 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US92/09382
```

331

1215

1275

1395

1335

```
Sequence 4290, Application US/09134001C
Sequence 4290, Application US/09134001C
Sequence 4290, Application US/09134001C
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE DE INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCU
TITLE DE INVENTION: DEIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: GTC-007
CURRENT APPLICATION NUMBER: US/09/134,001C
CURRENT PILING DATE: 1999-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR PRILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTICCICAGITITGCCAGGIGGCITITITAITGGGCIGGCAGITGCTGGGCTGAITIAI 1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       244 CTGCCTTCCCTGGGCAACAAGAGGCCCACCTGGGCAGGACGCCTTTTCAGGAAGAAGACGCC 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     410 AspleuMetSerIleGlyThrLeuLeuAlaTyrSerLeuValAlaAlaCysValLeuVal 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 PheTyrLeuHisValAspAspPheLeuIleArgIleValLysGluCysLeuLeuThr---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184 AAGCCIGITGIGIGGACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---HisValAsnSerLysLeuMetLeuTrpArgPheValMetGlySerPhePheAsnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   127 TTTTAT----CATATTCTGGATTTTTTGGATTCTTTTGTTTTCTCATCACTGGATTCAGGA
1048 AIGGCCAITGICACCAIIGGCIAIGIGCTGACAAAIGIGGCCIACIITACGACCAITAAI
                                                                                                                                                                                                                                                                                                                                                     1216 TCCATGAACGGTGGTGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGT
                                                                                                                                                                                                                                                                                                                                                                                         350 SerLeuLeuGlySerMetPheProMetProArgVallleTyrAlaMetAlaGluAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1276 CACCITCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTTACCAGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1336 ATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTTGGAGACCTCGACAGTCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  390 LeualaSerGlyalaValAlaValMetAlaPheLeuPheAspLeuLysAspLeuVal
                                                                                                                                                      AATTICICATIAGCAGIICCGATCIIIGITGCCCICTCCIGCTITGGC
                                                                                                                                                                                                                                                                                       332 TrpGluGlyAlaLysTyrAlaValAlaValGlySerLeuCysAlaLeuSer----Ala
                                                       294 LeuLeuileCysPheileAlaTyrPhe-----GlyValSerAlaAlaLeuThrLeuMet
                                                                                                                 1108 GCTGAGGAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    521
135
108
206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-667-170A-440 (1-2239) x US-09-134-001C-4290 (1-521)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Staphylococcus epidermidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8.97e-21
282.50
43.39%
24.11%
6.86%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1456 CTTCGATACAAA 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |||||||||||
LeuArgTyrGln 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
                                                                                                                                                                                                                                         1168 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -09-134-001C-4290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Stapu.
US-09-134-001C-4290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                          셤
                                                                                                                       ò
                                                                                                                                                                               g
                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                988 ITTGTTACTGAAGAAGTAGAAAACCCTGGAAAAACCATTCCCCTTGCAATATGTATATCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .::!!|
234 AsnAsnThrIysGluGlyIysProGlyValGlyGlyPheMetProPheGlyPheSer 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ---ATAATACGCCCTGCAGCTACTGCT---GTGATATCCCTGGCATTTGGACGCTACATT 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyargProlleGlyGluPheSerArgThrHisMetThrLeuAsnAlaProGlyValLeu 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           949 IAIGGAAIG----------IAIGCAIAIGCIGGCIGGTITIIACCTCAAC 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyLeuCysTyrGlyGluPheGlyAlaArgValProLysThrGlySerAlaTyrLeuTyr 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       679 CTGGAACCATTT----TITATTCAA 699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTITIGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTC--- 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              331 AGAGAGAAAGTGCAGCTGAAGAGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATT 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCACCATCATTGGAGCAGGAATCTTCATCTTCTTAAGGGCGTGCTCCAGAACACGGGC 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTITGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATAT 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ::: ||| :::::: ||| sersite || sersite || || sersite || || sersite 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             274 ThrThrGlyGluGluValLySAsnProGlnLysAlalleBroValGlyIleValAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |||| ||| :::::: ||| ||| |||||| :::
|GlyLeuLeuThrLeuGlyValLysGluSerAlaMetValAsnLysIlePheThrCysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :::|||::::::
214 ValLysAsnTrpGlnLeuThrGluGluAspPheGlyAsnThrSerGlyArgLeuCysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----GACGCCTTTTCAGGAAGAGTTCAAGTATTACGCGGTTGCCACTGGCTTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           760 GICCIPAAIAGCAIGAGIGICAGCIGGAGCGCCCGGAICCAGAITITCTIPAACCITITGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGTGGGCATGTCTCTGACCATC---TGGACGGTGTGTGGGGGTCCTGTCACTATTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                700 TGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATG
                                                                                                                                                                                                                                            629
103
80
183
183
                                                                                                                                                                                                                                                                                                Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-667-170A-440 (1-2239) x PCT-US92-09382-8 (1-629)
                                                                                                                                                                                                                                               Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           880 ACGCAGAACTTTAAA-----
                                                                                                                                                                                                                                   4.24e-21
286.00
43.16%
24.29%
6.94%
                                       : 629 amino acids
AMINO ACID
GY: linear
      SEQUENCE CHARACTERISTICS:
LENGTH: 629 amino acid
TYPE: AMINO ACID
TOPOLOGY: linear
                                                                                                                    MOLECULE TYPE: protein PCT-US92-09382-8
                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             625
                                                                                                                                                                                                                                                     Pred. No.:
```

d ò g

qq

g ò

g

à Db ò

ò g  $\delta$ Op δ g ò <u>ප</u>  $\delta$ 

 $\delta$ 

QQ δ 셤

 $\delta$ 

8 8

ò

243

26

```
ATGATTCATGTCCGCAAGCAC 1317 :::::: | | | | | | | | 318 318 318 318
                                                                                        ATGATAATGCTCTTCTGGA 1377
:::||| :::
IleileGlyValVallleGly 415
                                                                                                                                                        TCCTCAGTTTTGCCAGGTGG 1419
                                                                                                                                                                                                                      CGATACAAATGCCCAGATATG 1479
::: ::: :::
LysargGluGlyLysAspLeu 453
                                                                                                                                                                                                                                                                                    CCAGCTTTGTTTTCCTTCACA 1530
                                                                                                                                                                                                                                                                                                                                                                                                                TTTATTATATGGGACAAGAAA 1647
                                                                                                                                                                                                                                                                                                                                                    CCATTTAGTACAGGGATTGGC 1587
euAlaGlySerArgLeuLeuTyr 379
                                                                                                                                                                                :::
AlaGlyThrLeuValAlaPhe 435
                                                                                                                                                                                                                                                                                                                                                                             ||||
ysLeuTyrThrLeuileTrp 492
                                                                                                                                                                                                                                                                                                                                                                                                                                      :::
TyrGlylleArgHisSerLys 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nd DNA Coding Therefor
```

```
------ATGTATGCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAA 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141 GlyLysProlleGlyGluPheSerArgGlnHisMetAlaLeuAsnAlaProGlyValLeu 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     880 ACGCAGAACTITTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTGCCACTG 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGAACCATTT-----TTTATTCAA 699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaGlnThrProAspilePheAlaValileile------ileileIleLeuThr 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197 AsnValLeuValLeuCysPheileValValSerGly------PheValLysGlySer 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           :::|||::::::
214 IleLysAsnTrpGln-----LeuThrGluLysAsnPheSerCysAsnAsnAsnAspThr 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        232 AsnValLysTyrGlyGlyGlyGlyBlyPheMetProPheGlyPheSerGlyValLeuSerGly 251
                                                                                                                                                                                                                                                                                                                                                                                            31 AGAGAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATT 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCACCATCATTGGAGCAGGAATCTTCATCTCTCTAAGGGCGTGCTCCAGAACACGGGC 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            151 AGCGIGGGCAIGTCTCTGACCAIC---TGGACGGTGTGTGGGGGTCCTGTCACTATTTGGA 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATAT 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyLeuCysTyrGlyGluPheGlyAlaArgValProLysThrGlySerAlaTyrLeuTyr 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             568 ATTITGGAAGICITIGGICCATIACCAGCITITGIACGAGICTGGGIGGAACTCCIC--- 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---ATAATACGCCCTGCAGCTACTGCT---GTGATATCCCTGGCATTTGGACGCTACATT 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 700 TGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  760 GTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCCAGATTTTCTTAACCTTTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    820 AAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  622
102
80
176
67
                                                                                                                                                                                                                                                                       Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                           US-09-667-170A-440 (1-2239) x US-08-132-990A-4 (1-622)
                                                                                                                                                                                                                                        Length:
Matches:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864
TELEX: 66441 PENNIE
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 622 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTTTTTATTAGGA----
                                                                                                                                                                                                                                    2.03e-20
279.50
42.82%
24.00%
6.78%
                                                                                                                                        STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                         US-08-132-990A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              208
                                                                                                                                                                                                                                                                                                                                                                                                                              23
                                                                                                                                                                                                                                                                                                                                                                                                                                                               391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              43
                                                                                                                                                                                                                                                                                                         Query Match:
                                                                                                                                                                                                                                             No..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
```

1332 1393 TIGAATITCCTCAGTITIGCCAGGTGGCTTTTATIGGGCTGGCAGTTGCTGGCTGATT 1452 1213 GGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCTCTCGAGAG 1272 1333 GITATIGITITGCACCCTITGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTT 1392 1003 GTAGAAAACCCTGAAAAACCAFTCCCCTTGCAATATGTATTCCATGGCCAFTGTCACC 1062 1174 ---------TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCTTGCTTT 1212 304 MetMetProTyrPheCysLeuAspIleAspSerProLeuProGlyAlaPheLysHisGln 323 343 ---SerLeuLeuGlySerMetPheProMetProArgVallleTyrAlaMetAlaGluAsp 361 252 AlaAlaThrCysPheTyrAlaPheValGlyPheAspCysIleAlaThrThrGlyGluGlu 271 ||| ||| ||| ::: |||::: |||::: ||| 362 GlyLeuLeuPheLySPheLeuAlaLySIleAsnAsnArgThrLySThrProValIleAla 324 GlyTrpGluGluAlaLysTyrAlaValAlaIleGlySerLeuCysAlaLeuSerThr---1273 GGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCT 1063 ATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTG 1123 CTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC TATCTTCGATACAAA 1467 1453 g g ò d ò 유 ð 원 ð Dp ò ₽ ò 8 g 8 g

Search completed: October 31, 2003, 11:07:49
Job time : 64.5 secs

Sequence Sequence Sequence

Sequence

Sequence

Sequence Sequence Sequence

Sequence Sequence

Perfect score:

Title:

Sequence:

OM nucleic

Run on:

Scoring table:

us-09-667-170a-440.rapb

```
Sequence 48, Application US/10163866
; Sequence 48, Application US/10163866
; Publication No. US20030027188A1
; GENERAL INFORMATION:
    APPLICANT: EXELIXIS, INC.
    TITLE OF INVENTION: SLC75 AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE
    FILE REPERENCE: EX02-06-05
    CURRENT APPLICATION NUMBER: US/10/163,866
    CURRENT APPLICATION NUMBER: US 60/296,076
    PRIOR APPLICATION NUMBER: US 60/328,605
    PRIOR PLING DATE: 2001-06-05
    PRIOR PLING DATE: 2001-10-10
    PRIOR PLING DATE: 2001-10-2
    PRIOR PLING DATE: 2001-10-2
    PRIOR PLING DATE: 2001-10-2
    PRIOR PLING DATE: 2002-02-15
    PRIOR PLING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 345, App
Sequence 4932, Ap
Sequence 10662, A
Sequence 1853, Ap
Sequence 9855, Ap
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 43, Appl Sequence 44, Appl Sequence 46, Appl Sequence 46, Appl Sequence 16, Appl Sequence 16, Appl Sequence 17, Appl Sequence 747, Appl Sequence 586, Appl Sequence 580, Appl Sequence 43216, Appl Sequence 43216, Appl Sequence 50, Appl Sequence 50, Appl Sequence 50, Appl Sequence 43216, Appl Sequence 50, Appl Sequence 43216, Appl Sequence 9780, Appl Sequence 9780, Appl Sequence 14414, Appl Sequence 586, Appl Sequence 586, Appl Sequence 586, Appl Sequence 686, Appl Sequence 6
15 US-10-163-866-48
15 US-10-163-866-49
15 US-10-163-866-49
15 US-10-163-866-34
15 US-10-163-866-34
15 US-10-163-866-38
15 US-10-163-866-38
15 US-10-163-866-40
15 US-10-163-866-41
15 US-10-163-866-42
15 US-10-163-866-42
15 US-10-163-866-42
15 US-10-163-866-42
15 US-10-163-866-43
15 US-10-163-866-44
15 US-10-163-866-44
15 US-10-163-866-45
16 US-10-163-866-45
17 US-09-815-923-14
18 US-09-913-923-586
18 US-10-163-866-47
19 US-09-913-923-586
18 US-10-163-866-47
19 US-09-913-923-586
18 US-10-163-866-50
18 US-10-163-86-3531
18 US-10-163-86-3531
18 US-10-156-761-1482
18 US-10-156-761-1482
18 US-10-156-761-1482
18 US-10-156-761-1482
18 US-10-156-761-163-8
18 US-10-158-761-163-8
18 US-10-158-761-163-8
18 US-10-158-761-163-8
18 US-10-158-761-163-8
18 US-10-158-761-163-8
18 US-10-158-761-163-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-815-242-12941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-156-761-8760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                  11198
11156.5
11156.5
11131.5
11131.5
11111.5
11101.5
11101.5
11011.5
1101.5
1101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5
101.5

                2519
2519
2298
1210.5
1206.5
1198.5
                   Command line parameters:
-MODEL=frame+ n2p.model -DEV=xlp
-MODEL=frame+ n2p.model -DEV=xlp
-Q=/Cqn2_1/USPFTO_spool/105096x110/runat_31102003_104953_10440/app_query.fasta_1.2375
-Q=/Cqn2_1/USPFTO_spool/105096x170/runat_31102003_104953_10440/app_query.fasta_1.2375
-DE-Published Applications AA -OFWH=fastan -SUPFIX=x=pb -MINMATCH=0.1
-LOOPCI_=0 -LOOPEXT=0 -UNIT$=bits -START=1 -RND=-1 -MATRIX=blosum62
-TRANS=humand+0 cd1 -LIST=45 - DOCALLGN=200 -THR SCORE=pct -THR MAX=10
-TRANS=humand+0 cd1 -LIST=45 - DOCALLGN=200 -THR SCORE=pct -THR PAX=10
-MAXIEN=200000000 -USER=US09667170 @CGN 1 1 141 @runat 31103003 104953_10440
-MAXIEN=200000000 -USER=US09667170 @CGN 1 1 141 @runat 31103003 104953_10440
-LONGING -DEV TIMBOÜT=120 -WARR TIMBOÜT=0 -THREADS=1 -XGARPOE=10 -XGARPEXT=0.5
-FGARPOP=6 -FGĀREXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                      October 31, 2003, 11:02:11 ; Search time 200 Seconds (without alignments) 3831.960 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                           Published Applications AA:*

| cgn2_6/ptcdata/1/pubpaa/USO7_PUBCOMB.pep:*
2: /cgn2_6/ptcdata/1/pubpaa/USO7_NEW PUB.pep:*
3: /cgn2_6/ptcdata/1/pubpaa/USO6_NEW PUB.pep:*
4: /cgn2_6/ptcdata/1/pubpaa/USO6_PUBCOMB.pep:*
5: /cgn2_6/ptcdata/1/pubpaa/USO6_PUBCOMB.pep:*
6: /cgn2_6/ptcdata/1/pubpaa/USO6_NEW PUB.pep:*
7: /cgn2_6/ptcdata/1/pubpaa/USO8_NEW PUB.pep:*
8: /cgn2_6/ptcdata/1/pubpaa/USO8_PUBCOMB.pep:*
9: /cgn2_6/ptcdata/1/pubpaa/USO8_PUBCOMB.pep:*
10: /cgn2_6/ptcdata/1/pubpaa/USO8_PUBCOMB.pep:*
11: /cgn2_6/ptcdata/1/pubpaa/USO9_PUBCOMB.pep:*
12: /cgn2_6/ptcdata/1/pubpaa/USO9_PUBCOMB.pep:*
13: /cgn2_6/ptcdata/1/pubpaa/USO9_PUBCOMB.pep:*
14: /cgn2_6/ptcdata/1/pubpaa/USO9_PUBCOMB.pep:*
15: /cgn2_6/ptcdata/1/pubpaa/USO9_PUBCOMB.pep:*
16: /cgn2_6/ptcdata/1/pubpaa/USO9_PUBCOMB.pep:*
17: /cgn2_6/ptcdata/1/pubpaa/USO0_PUBCOMB.pep:*
18: /cgn2_6/ptcdata/1/pubpaa/USO0_NEW_PUB.pep:*
19: /cgn2_6/ptcdata/1/pubpaa/USO0_NEW_PUB.pep:*
17: /cgn2_6/ptcdata/1/pubpaa/USO0_NEW_PUB.pep:*
18: /cgn2_6/ptcdata/1/pubpaa/USO0_NEW_PUB.pep:*
18: /cgn2_6/ptcdata/1/pubpaa/USO0_PUBCOMB.pep:*
                                                   GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                               protein search, using frame_plus_n2p model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  642050 segs, 171146064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.00
0.00
0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Pgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0% Maximum Match 100%
                                                                                                                                                                                                                                                                                                                                                                    US-09-667-170A-440
4120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0 Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fgapop
Delop
```

Jatabase :

Description

Query Score Match Length DB

Result

Š.

Sequence 2, Appli Sequence 34, Appl Sequence 12078, A Sequence 12941, A Sequence 8760, Ap

Sequence 4, Sequence 2

```
TYPE: PRT
CRGANISM: Homo sapiens
US-10-163-866-49
                                                                                                                                                                                                                                                                                                                                               1564
                                                                                     1204
                                                                                                          326
                                                                                                                               1264
                                                                                                                                                                         1324
                                                                                                                                                                                                                 1384
                                                                                                                                                                                                                                        386
                                                                                                                                                                                                                                                                                                        1504
                                                                                                                                                                                                                                                                                                                                                                                          1624
                                                                                                                                                                                                                                                              1444
                                                                                                                                                                                                                                                                                                                            426
                                                                                                                                                                                                                                                                                                                                                                                                                                                         486
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                            Ωþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                     셤
                                                             g
                                                                                   ð
                                                                                                    g
                                                                                                                             \delta
                                                                                                                                                 g
                                                                                                                                                                      \delta
                                                                                                                                                                                       q
                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1024 ATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACTTGGCTATGTGCTGACAAAT 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285
                                                                                                                                                                                                                                                                                                                                                                                                                          125
                                                                                                                                                                                                                                                                                                                                                                                                                                                663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                       423
                                                                                                                                                                                                                                                                                                                  483
                                                                                                                                                                                                                                                                                                                                                            543
                                                                                                                                                                                                                                                                                                                                                                     CysGlyValLeuSerLeuPheGlyAlaLeuSerTyrAlaGluLeuGlyThrThrIleLys 105
                                                                                                                                                                                                                                                                                                                                                                                                     603
                                                                                                                                                                                   CTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAAGACGCC 303
                                                                                                                                                                                                                                                                                            65
                                                                                                                                                                                                                                                                                                                                     85
                                                                                                                                                    4 LysProValValSerThrIleSerLysGlyGlyTyrLeuGlnGlyAsnValAsnGlyArg 23
                                                                                                                                                                                                                                                 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TrpSerAlaArg11eG1n11ePheLeuThrPheCysLysLeuThrAla11eLeu11e11e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGlyArgAspSerSerIleThrArgLeuProLeuAlaPheTyrTyrGlyMetTyrAla
                                                                                                                                                                                                                                                                                                                                                           TGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ArgValTrpValGluLeuLeuIelleArgProAlaAlaThrAlaValIleSerLeuAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITIGGACGCTACATICTGGAACCATITITIATICAATGTGAAATCCCTGAACTTGCGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleValProGlyValMetGlnLeuIleLysGlyGlnThrGlnAsnPheLysAspAlaPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAGGAAGAGTTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATTGGAATGTATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAAACCCTGAAAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TyrAlaGlyTrpPheTyrLeuAsnPheValThrGluGluValGluAsnProGluLySThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266 IleProLeuAlaIleCysIleSerMetAlaIleValThrIleGlyTyrValLeuThrAsn
                                                                                                                                                                                                                             304 ITTTCAGGAAGAGGCCTTTTCAGGAAGAGAGAAAGTGCAGCTGAAGAGGAAAGTCACT
                                                                                                                                                                                                                                                                                   ProLysGlyValLeuGlnAsnThrGlySerValGlyMetSerLeuThrIleTrpThrVal
                                                                                                                                                                                                                                                                                                                                                                                                     AAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                               CGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGAGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAAACGCAGAACTTTAAAGACGCCTTT
                                                                                                                                                                                                                                         ------GluLysValGlnLeuLysArgLysValThr
                                                                                                                                                                                                                                                                       TTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTT
                                                                                                                                                                                                                                                                                                                 CCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGGTG
                                            501
0 0
0 118
                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                               LeuProSerLeuGlyAsnLysGluProProGlyGln----
                                                                                                                   US-09-667-170A-440 (1-2239) x US-10-163-866-48 (1-501)
                                         2.41e-228
2519.00
96.51%
96.51%
                                                            Percent Similarity:
Best Local Similarity:
Query Match:
; ORGANISM: Homo
US-10-163-866-48
                               Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             964
                                                                                                                                                                                   244
                                                                                                                                                                                                                                                                       364
                                                                                                                                                                                                                                                                                            46
                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844
                                                                                                                                                                                                        24
                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                98
                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                                504
                                                                                                                                                                                                                                                 36
                                                                                                                                                                                                                                                                                                                  124
                                                                                                                                                                                                                                                                                                                                                            184
                                            Pred. No.:
                                                       Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                          à
                                                                                                                                                             d
                                                                                                                                                                                  \delta
                                                                                                                                                                                                     g
                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
```

```
US-01-163-866-49

i Sequence 49, Application US/10163866

j Publication No. US20030027188A1

general Information.

ITLE OF INVENTION:

ITLE OF INVENTION:

TITLE OF INVENTION:

CURRENT APPLICATION NUMBER: US/10/163,866

CURRENT APPLICATION NUMBER: US 60/296,076

PRIOR PRILING DATE: 2001-06-05

PRIOR PRILING DATE: 2001-06-05

PRIOR APPLICATION NUMBER: US 60/328,605

PRIOR APPLICATION NUMBER: US 60/328,605

PRIOR APPLICATION NUMBER: US 60/338,733

PRIOR PILING DATE: 2001-10-2

PRIOR APPLICATION NUMBER: US 60/357,600

PRIOR PILING DATE: 2002-02-15

PRIOR PILING DATE: 2002-02-15

PRIOR PILING DATE: 2002-02-15

PRIOR SPELICATION NUMBER: US 60/357,600

PRIOR PILING DATE: 2002-02-15

PRIOR PILING DATE: 2000-03-11

PRIOR PILING DATE: 2000-03-11

PRIOR PILING DATE: 2000-03-11

PRIOR PILING DATE: 2000-03-11

PRIOR PILING DATE: 2000-03-15

PRIOR PILING DATE: 2000-03-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1623
                                                                                                                                             1203
                                                                                                                                                                                                                                                                                              1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            445
                                                                      305
                                                                                                                                                                                                                                                                                                                                                                         345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PhelleProAlaLeuPheSerPheThrCysLeuPheMetValAlaLeuSerLeuTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              446 AsproPheSerThrGlyIleGlyPheVallleThrLeuThrGlyValProAlaTyrTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAACC
1084 GTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346 SerargGluGlyHisLeuProGluIleLeuSerMetIleHisValArgLySHisThrPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    366 LeubroAlaValIleValLeuHisProLeuThrMetIleMetLeuPheSerGlyAspLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspSerLeuLeuAsnPheLeuSerPheAlaArgTrpLeuPheIleGlyLeuAlaValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        egecrearringaracaaargcccagarargcarccrrrcaaggrgccac
                                   286 ValAlaTyrPheThrThrIleAsnAlaGluGluLeuLeuLeuSerAsnAlaValAlaVal
                                                                                                                                             1144 ACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCTC
                                                                                                                                                                                        306 ThrPheSerGluArgLeuLeuGlyAsnPheSerLeuAlaValProllePheValAlaLeu
                                                                                                                                                                                                                                                                                          TCCIGCTTTGGCTCCATGAACGGTGTGTTTTGCTGTCTCCCAGGTTATTCTATGTTGCG
                                                                                                                                                                                                                                                                                                                                      SerCysPheGlySerMetAsnGlyGlyValPheAlaValSerArgLeuPheTyrValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                TOTOGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               406 GlyLeulleTyrLeuArgTyrLysCysProAspMetHisArgProPheLysValProLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TICATCCCAGCITIGITITICCTICACATGCCTCTTCATGGTTGCCCTTTTCCCTCTATTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAGTCTTTTGAATTTCCTCAGTTTTTGCCAGGTGGCTTTTTTATTGGGCTGGCAGTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1684 AGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTA 1731
```

Db 326 SerCysPheGlySerMetAsnGlyGlyValPheAlaV	Qy 1264 TCTCGAGAGGGTCACCTTCCAGAAATCCTCCATGATGATCTTCCATGATGATGATGATGATCTTCCATGATGATGATGATGATGATGATGATGATGATGATGATGA	Qy 1324 CTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGA: .	Qy 1384 GACAGTCTTTTGAAFTTTCTCAGTTTTGCCAGGTGGCT 	1444	1504		Oy 1624 CTCTTTATTATATGGGACAAGAAACCCAGGTGGTTATA(	Qy 1684 AGAACATTACAAATAATACTGGAAGTTGTACCAGAAG;	RESULT 4 02-10-163-866-54 ; Sequence 54, Application US/10163866 ; Publication No. US20030027188A1	GENERAL INFORMATION: ; APPLICANT: EXELIZS, INC. ; TITLE OF INVENTION: SLOTS AS MODIFIERS OF THE p5: ; FILE REFERENCE: EX02-080C	CURRENT APPLICATION NUMBER: US/10/163,866 ; CURRENT FILING DATE: 2002-06-05 ; PRIOR APPLICATION NUMBER: US 60/296,076 ; PRIOR FILING DATE: 2001-06-05	PRIOR APPLICATION NUMBER: US 60/328,605 ; PRIOR FILING DATE: 2001-10-10 ; PRIOR APPLICATION NUMBER: US 60/338,733 ; PRIOR FILING DATE: 2001-10-22	; PRIOR APPLICATION NUMBER: US 60/357,253 ; PRIOR FILING DATE: 2002-02-15 ; PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR FILING DATE: 2002-02-15	NOWBER OF SEQ ID NOS: 54 ; SOFTWARE: Patentin version 3.1 ; SEQ ID NO 54 ; LENGTH: 507	; TYPE: PRT ; ORGANISM: Homo sapiens US-10-163-866-54	5.36e-105 Length: 1210.50 Matches: 66.19% Conservat	: t	US-09-667-170A-440 (1-2239) x US-10-163-866-54 (1-5) Qy 247 CCTTCCCTGGGCAACAAGAACCACCTGGGCAGGACG
IIS-69-667-1708-440 (1-2239) × IIS-10-214-8678-13 (1-502)	184 AAGCCTGTTGTGTCCACCATCCCAAAGAGTT	244 CTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGACGCC 303 24 LeuProSerMetGlyAspGlnGluProProGlyGln		TTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAAATCTCTCATCTCT	424 CCTAAGGGGGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGGTG 483	484 IGIGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAG 543 	544 AAATCIGGAGGTCATTACACATATATTTIGGAAGTCTTTIGGTCCATTACCAGCTTTIGTA 603 	ATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCA	TITGGACGCTACATTCTGGAACCATTTTTTTTTTTCAAATGCGAAATCCCTGAACTTGCGATC 72	724 AAGCICATTACAGCIGIGGGCATAACIGIAGGGTCCTAAATAGCAIGAGTGICAGC 783        :::	784 IGGAGCGCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAATTCTGATAATT 843 	844 ATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCCTTT 903 	904 TCAGGAAGAGATTCAAGTATTACGGGGTTGCCACTGGCTTTTTATTATGGAATGTATGCA 963 	964 TATGCTGGTTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAACC 1023 	1024 ATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAAAT 1083 [	GTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTCAAATGCAGTGGCAGTG	1144 ACCTITICIGAGGGGTACTGGGAAATITCTCATIAGCAGTICCGAICTITGTIGCCCTC 1203 	12
-811	Vy Pp	y d	yo d	oy B	Q Q	çy du	상	상	Qy Dp	රු පු	රු ල්	S P	S d	Qy Db	γο do	QZ Dp	장· 업	ờ

```
ATTCATGTCCGCAAGCACACTCCT 1323
                                        CATCGTCCTTTCAAGGTGCCACTG 1503
                                                                                                                            ATGGTGCCCTTTCCCTCATTCG 1563
                                                                                                                                                        CCTGACTGGAGTCCCTGCGTATTAT 1623
                                                                                                                                                                                   53 PATHWAY AND METHODS OF USE
ValSerArgLeuPheTyrValAla 345
                      |||||||||
|IleHisValHisLysHisThrPro 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCCTTTTCAGGAAGAGACGCCTTT 306
                                                                                                                                                                                                               GAAGATAAG 1728
                                                                                                                                                                                                                         507
232
95
3
3
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -507)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
e
```

Ŋ

1560

492

```
TAPPLICATION: ALCAS AND PIERS OF THE p53 PATHWAY AND METHODS OF USE FILE REFERENCE: EX02-080C
CURRENT APPLICATION NUMBER: US/10/163,866
CURRENT APPLICATION NUMBER: US/10/163,866
CURRENT FILING DATE: 2002-06-05
PRIOR FILING DATE: 2001-06-05
PRIOR PILING DATE: 2001-06-05
PRIOR PILING DATE: 2001-06-05
PRIOR PELICATION NUMBER: US 60/328,605
PRIOR PILING DATE: 2001-10-22
PRIOR APPLICATION NUMBER: US 60/328,733
PRIOR APPLICATION NUMBER: US 60/357,600
                                                  1381 CTCGACAGTCTTTTGAATTTCCTCAGTTTTTGCCCAGGTGGCTTTTTATTGGGCTGGCAGTT 1440
373 ProValProSerLeuValPheThrCysValMetThrLeuLeuTyrAlaPheSerLysAsp 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247 CCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGACGCCTTT 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            367 CTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCTCCT 426
                                                                                                                                                           413 IleGlyWet1leTrpLeuArgHisArgLySProGluLeuGluArgProlleLySValAsn
                                                                                                                                       1441 GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCA
                                                                                                                                                                                                                           CIGITCATCCCAGCITTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                     1621 TATCTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                473 PhePheGlyValTrpTrpLysAsnLysProLysTrpLeuLeuGlnGlyIlePheSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51 GlySerAlaProAlaGlyGluGly---GluGlyValThrLeuGlnArgAsnIleThrLeu
                                                                             433 LeuAlaLeuProValPhePhelleLeuAlaCysLeuPheLeuIleAlaValSerPheTrp
                                                                                                                                                                                                                                                                                                                1561 TCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTAT
                                                                                                                                                                                                                                                                                                                                                         453 LysThrProValGluCysGlyIleGlyPheThrIleIleLeuSerGlyLeuProValTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31 ProblablaGluLysLysLysGlublaArgGluLysMetLeublaBlaLysSerAlaAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  307 TCAGGAAGAGGCCTTTTCAGGAAGAGAGAAGTGCAGCTGAAGAGGAAAGTCACTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1681 ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAA 1722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     493 ThrValLeuCysGlnLysLeuMetGlnValValProGlnGlu 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             524
231
96
164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-667-170A-440 (1-2239) x US-10-163-866-37 (1-524)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 37, Application US/10163866 Publication No. US20030027188A1 GENERAL INFORMATION: APPLICANT: EXELIXIS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.29e-104
1206.50
66.19%
46.76%
29.28%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens
US-10-163-866-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-163-866-37
                                                                                                                                                                                                                           1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                             \delta
                                                                                         g
                                                                                                                                    \delta
                                                                                                                                                                         g
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAAAACCCTGAAAAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  021 ACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GIGACCTITICIGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCC 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTTGCTGTCTCCAGGTTATTCTATGTT 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACT 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCICTACCAGCTGTTAITGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGAC 1380
                                                                                                                                                                                                                                                486
                                                                                                                                                                                                                                                                                                                                       546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaThrTyrLeuLeuLysProLeuPheProThrCysProValProGluGluAlaAlaLys 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||||::: ::: ::: ::: ::: :::!
LeuValAlaCysLeuCysValLeuLeuLeuThrAlaValAsnCysTyrSerValLysAla 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlySerArgGluGlyHisLeuProSerlleLeuSerMetlleHisProGlnLeuLeuThr 372
                                                                                                                                                              426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAAAGGCAGAAACTTTAAAAGACGCCTTTTCA 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----GGAAGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTTATTAGGAATGTAT 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaTyrGlyGlyTrpAsnTyrLeuAsnPheValThrGluGluMetIleAsnProTyrArg 272
                                                                                                                                                                                                    72
                                                                                                                                                                                    AlaThrArgValGlnAspAlaPheAlaAlaAlaLySLeuLeuAlaLeuAlaLeuIleIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ::: ||||
LeuLeuGlyPheValGlnIleGlyLySGlyAspValSerAsnLeuAspFroAsnPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    233 PheGluGlyThrLysLeuAspValGlyAsnIleValLeuAlaLeuTyrSerGlyLeuPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      273 AsnLeuProLeuAlallellellelleserLeuProllevalThrLeuValTyrValleuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProAlaAlaGluLysGluGluAlaArgGluLysMetLeuAlaAlaLysSerAlaAsp
                                                                      TCAGGAAGAGACGCCTTTTCAGGAAGAGAAAAGTGCAGCTGAAGAGGAAAGTCACTTTA
                                                                                                GlySerAlaProAlaGlyGlyGly---GluGlyValThrLeuGlnArgAsnIleThrLeu
                                                                                                                                                           CTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCTCT
                                                                                                                                                                                                                                                427 AAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGACGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCGATCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            787 AGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGIGGCCTACTITACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCA
                                                                                                                                                                                                                                                                                                                                     GGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----
                                                                                                                34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                    307
                                                                                                                                                         367
                                                                                                                                                                                                    23
                                                                                                                                                                                                                                                                                       73
                                                                                                                                                                                                                                                                                                                                                                                                                         547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                                                                                                                                                93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95
PP
PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                    ò
                                                                                                             g
                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

.

Db 453 LysThrProValGluCysGlyIleGlyPheThrIleIleLeuSerGlyLeuProValTyr 472  Qy 1621 TATCTTTATTATATGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA 168C  :::	RESULT 7  US-10-163-866-39  US-10-163-866-39  Sequence 39, Application US/10163866  Publication No. US20030027188A1  GENERAL INFORMATION:  APPLICANT: EXELIKIS, INC.  TITLE OF INVENTION: SLC7S AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE  CURRENT APPLICATION NUMBER: US/10/163,866  CURRENT FILING DATE: 2002-06-05  PRIOR FILING DATE: 2001-06-05  PRIOR FILING DATE: 2001-06-05  PRIOR FILING DATE: 2001-06-05  PRIOR FILING DATE: 2001-010-10	; PRIOR APPLICATION NUMBER: US 60/338,733 ; PRIOR FILING DATE: 2001-10-22 ; PRIOR FILING DATE: 2001-10-22 ; PRIOR FILING DATE: 2002-02-15 ; PRIOR PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR PRIOR DATE: 2002-02-15 ; NUMBER OF FILING DATE: 2002-02-15 ; NUMBER OF SEQ ID NOS: 54 ; TYPE: PRI ; CRGANISM: Homo sapiens US-10-163-866-39	Alignment Scores:     Pred. No.:     Pred. No.:     Score:     Sco	Db 14 ProvalAlaGluGluLysGluGluAlaArgGluLysWetLeuAlaSerLysArgAlaAsp 33  Qy 307 TCAGGAAGAGCCCTTTCAGGAAGAGAGAGGCTGAAGAGAAGTCACTTTA 366  Db 34 GlyAlaAlaProAlaGlyGluGlyGluGlyValThrLeuGlnArgAsnileThrLeu  Qy 367 CTCAGGGGAGTCTCATTTGGCACCATCATTGGAGCAGCATCTTCATCTCTCT  Db 53 LeuAsnGlyValAlaIleIleValGlyAlaIleIleGlySerGlyIlePheValThrPro 72	427 AAGGGCTGCTCCAGAACACGGGCAGCGTGGGCATCTCTCTC
	GGACGCTACATTCTGGAACCATTTTATTCAATGTGAAATCCTGAACTTGCGATCAAG  AlaAlaTyrLeuluysProleubheProthrCysProvalProGluGlualaAlaLys  AlaAlaTyrLeuluuysProleubheProthrCysProvalProGluGlualaAlaLys  CTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTPAATAGCATGAGTGTCAGCTGG		1081 AATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTGTTCAAATGCAGGTGGCA 1140  293 ASnLeualaTyrPheThrThrLeuSerThrGluGlnMetLeuSerSerGluAlaValAla 312  1141 GTGACCTTTTCTGAGCGGTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGC 1200  313 ValaspPheGlyAsnTyrHisleuGlyValMetSerTrplleIleProValPheValGly 332  1201 CTCTCCTGCTTTGGCTCCATGAAGGGGGGTGTTTGCTCCAGGTTATTCTATTGTT 1260  333 LenSerCvsPheGlyAsnTyrHisleuGlyValMetSerTrplleIleProValPheValGTT 1260  343 LenSerCvsPheGlyGarGaGGGGGGGGGTGTTTTGCTCCAGGTTATTCTATGTT 1260  343 LenSerCvsPheGlyGarValAsnGdyserTenPheMptSerCsprartTcTATGTT 120	GCGTCTCGAGGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTGTCCGCAGGGGCTCACTCCTCCATCATTCCATGTCCGCAAGCACACTCTCCATGATTCATGTCCGCAAGCACACTTGTCATGTCCGCAAGCACACTTGTCATGACAATCCTTGACAATGATAATGATTTTGTTTTTGCACCCTTTGACAATGATAATGCTCTTTGAGGACTTGATAATGATAATGATAATGATATTGTTTTTGCACCCTTTGACAATGATAATGATATTCTTTTTGAGAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGATAATGAATAAT	1381 CTGGACAGTCTTTGAATTTCTCAGGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTT 1440  ::

gp  $\delta$ 

à

ŏ g 8 g ò

ω

```
91 AlaValCysGlyValPheSerIleValGlyAlaLeuCysTyrAlaGluLeuGlyThrThr 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       298 GACGCCTTTTCAGGAAGAGACGCCTTTTCAGGAAGAGAAAAGTGCAGCTGAAGAGAAA 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    418 ATCTCTCTAAGGGGGGGGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGG 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             598 ITTGTACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            171 AlaAlaLysLeuValAlaCysLeuCysValLeuLeuLeuThrAlaValAsnCysTyrSer 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGT 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    :::|||
31 GluhlaArgArgGlyAspGlyAlaAspProGluGlyGluGlyValThrLeuGlnArgAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         358 GTCACTTTACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCAGCTGGAGCGCCCGGATCCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538 ATAMAGAMATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    478 ACGGTGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACT
                                                                                                                                                                                                             L- AND D-AMINO ACIDS AND
                                                                                                                                          APPLICANT: ENDOY, HITOSHI
APPLICANT: ENDOY, HITOSHI
APPLICANT: ENDOY, HITOSHI
APPLICANT: ENDOY, HITOSHI
TITLE OF INVENTION: SODIUM-INDEPENDENT SWALL NEUTRAL AMINO ACID
TITLE OF INVENTION: TRANSPORTERS TRANSPORTING L- AND D-AMINO ACIDS
TITLE OF INVENTION: TRANSPORTERS TRANSPORTING L- AND D-AMINO ACIDS
TITLE OF INVENTION: TRANSPORTERS TRANSPORTING L- AND D-AMINO ACIDS
FILE REFERENCE: 57783 (715.26)
CURRENT APPLICATION NUMBER: PCT/J0214,867A
PRIOR PILING DATE: 20012-08-07
PRIOR FILING DATE: 2001-01-09
PRIOR FILING DATE: 2001-01-09
PRIOR FILING DATE: 2001-01-07
NUMBER OF SEQ ID NOS: 17
            493 ThrValLeuCysGlnLysLeuMetGlnValValProGlnGlu 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-667-170A-440 (1-2239) x US-10-214-867A-10 (1-512)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                        Sequence 10, Application US/10214867A Publication No. US20030148444A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8.12e-104
1198.00
67.36%
47.61%
29.08%
                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 10
LENGTH: 512
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Rattus
                                                                   US-10-214-867A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-214-867A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATATGCTGGCTGTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021 ACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GIGACCITITICIGAGCGCTACTGGGAAATTICTCATTAGCAGTICCGAICTIGTIGCC 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CICICCICCIPACTICCATGAACGGIGGIGGIGITIGCIGICICCAGGIIATICTATGIT 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCCCATGATTCATGTCCGCAAGCACACT 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CICGACAGICTITIGAATITICCICAGITIGCCAGGIGGCTTTTTATIGGGCIGGCAGIT 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATCTCTTTATTATATGGGACAAGAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTCATCCCAGCTTTGTTTTCCTTCACATGCCTTCATGGCCTTTCCCTCTAT 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       352
                                                                                            ::: ||| :::|||::: ||||| LeuLeuGlyPheValGlnIleGlyLySGlyAspValSerAsnLeuAspProAsnPheSer 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ||||:::||||:::::::::
|ProValProSerLeuValPheThrCysValMetThrLeuLeuTyrAlaPheSerLysAsp 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        453 LysThrProValGluCysGlyIleGlyPheThrIleIleLeuSerGlyLeuProValTyr 472
GTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAAACGCAGAACTTTAAAGACGCCTTTTCA 906
                                                                                                                                                                                                                                                                                                                                                                                       -----GGAAGAGTTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTAT 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PhePheGlyValTrpTrpLysAsnLysProLysTrpLeuLeuGlnGly1lePheSerThr 492
                                                                 GGACGCTACATTCTGGAACCATTTTTTTTTTTCAATGTGAAATCCCTGAACTTGCGATCAAG
                                                                                                                                            CTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGG
                                                                                                                                                                                                                            AGCGCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATA
                                                                                                                                                                                                                                                                                                                                                                                                                  233 PheGluGlyThrLysLeuAspValGlyAsnIleValLeuAlaLeuTyrSerGlyLeuPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyserArgGluGlyHisLeuProSerIleLeuSerMetIleHisProGlnLeuLeuThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTTGGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1561 TCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAA 1722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1681
                                                                                                                                                                                                                            787
                                                                                                                                                                                                                                                                                                           847
                                                                                                                                                                                                                                                                                                                                                                                       907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    473
                                                                                                                                              727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         393
```

g

à g ò g

ò

g ò 셤

à

g 8 셤 ò 엄 8 ద ò

 $\delta$ 

417

70

50

537

90

597

g

g ठे 유

ਨੇ

셤 ð Dp 8 g ò d à g  $\stackrel{>}{\circ}$ d 6 Q ò g ò d ò g  $\delta$ gg

g ð

```
ACTGAAGAAGTAGAAAACCCTGAAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              157 ProSerCysAspProProTyrLeuAlaCysArgLeuLeuAlaAlaAlaCysIleCysLeu 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97 CysTyrAlaGluLeuGlyThrThrIleThrLysSerGlyAlaSerTyrAlaTyrIleLeu 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |||| :::|||||||||:::::::::|||||| GluThrMetGlnLeuLysLysGluTleSerLeuLeuLeuAsnGlyValSerLeuValValGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   694 ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGGCATAACTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITIGCAAGCTCACAGCAATICIGAIAATTAIAGICCCIGGAGITAIGCAGCTAAITAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ::: |||::: |||:::::||| :::
197 TyralaLysValValAlaLeuIleAlaIleIleValMetGlyLeuValLysLeuCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    257 ThrGluGluIleLysAsnProGluArgAsnLeuProLeuAlaIleGlyIleSerMetPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAAAGTGCAGCTGAAGAGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIGGGCAIGICTCTGACCAICTGGACGGTGTGGGGGTCCTGTCACTATTTGGAGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              754 GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCCAGATTTTCTTAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     394 ACCATCATTGGAGCAGGAATCTTCATCTCTAAGGGCGTGCTCCAGAACACGGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  634 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        237 SerieualaLeuTyrSeralaLeuPheSerTyrSerGlyTrpAspThrLeuAsnPheVal
                                                                                                                                                                                                                                                                                                                                 515
218
105
141
                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-667-170A-440 (1-2239) x US-10-214-867A-12 (1-515)
                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
TITLE OF INVENTION: GENES THEREOF
FILE REFERENCE: 57783 (71526)
CURRENT APPLICATION NUMBER: US/10/214,867A
CURRENT FILING DATE: 2002-08-07
FRIOR APPLICATION NUMBER: PCT/JPD1/00031
PRIOR FILING DATE: 2001-01-09
PRIOR APPLICATION NUMBER: JP 2000-28822
PRIOR FILING DATE: 2000-02-07
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                    Indels:
                                                                                                                                                                                                                                                                                                                             6.64e-100
1156.50
69.16%
46.68%
28.07%
                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                     ORGANISM: Homo
                                                                                                                                                                                                                                                                      US-10-214-867A-12
                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 994
                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                             No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                GAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTC 1059
                                                                                                                                                                                                                                                                                                        ACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTG 1119
                                                                                                                                                                                                                                                                                                                                                                             CTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGGAAATTTCTCATTA 1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGIICCGAICTITGIIGCCCICTCCIGCIIIGGCICCAIGAACGGIGGIGIGIIIGCI 1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1240 GTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCCATG 1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1300 ATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATG 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1360 ATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTTGCCAGGTGG 1419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITITIAITGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATG 1479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1540 ATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACT 1599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1660 AGAATAATGTCAGAGAAAATAACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAA 1719
                                                                                                                                                                                                                                                                        290
                                                                                                                                                                              LeuThrSerGluAlaValAlaValAspPheGlyAsnTyrHisLeuGlyValMetSerTrp 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 331 IlelleProValPheValGlyLeuSerCysPheGlySerValAsnGlySerLeuPheThr 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||||||| ::: ||||||::: ||||||| 371 IleHisProGlnLeuLeuThrProValProSerLeuValPheThrCysValMetThrLeu 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeulleAlaValSerPheTrpLysThrProLeuGluCysGlylleGlyPheAlailelle 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||:::|||:::|||
| LeuSerGlyLeuProValTyrPhePheGlyValTrpTrpLysAsnLysProLysTrpIle 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 12, Application US/10214867A
Publication No. US2003014844A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: ENDOU, HITOSHI
APPLICANT: KANAI, YOSHIKAISU
TITLE OF INVENTION: SODIUM-INDEPENDENT SMALL NEUTRAL AMINO ACID
TITLE OF INVENTION: TRANSPORTERS TRANSPORTING L- AND D-AMINO ACIDS
             -----GGTCAAACGCAG
                                :::|||||||::: |||| :::|||::: ||||
LeullelleLeuLeuGlyPheIleGlnMetGlyLysAspIleGlyGlnGlyAspAlaSer
                                                                                                                                                         GCTTTTTATTATGGAATGTATGCATATGCTGGCTGGTTTTACCTCAACTTTGTTACTGAA
                                                                                                                                                                                                                                                        CTGACTGGAGTCCCTGCGTATTATCTCTTTATATGGGACAAGAACCCAGGTGGTTT
                                                                                  AACTTT----AAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTGCCACTG
           ATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAA 1722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        511 Ġlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
US-10-214-867A-12
                                                                                  886
                                                                                                                                                                                                                                                                                                        1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               391
                                                                                                                                                         940
                                                                                                                                                                                                                                1000
                                                                                                                                                                                                                                                                    271
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1180
                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                             1120
                                                                                                                                                                                                                                                                                                                                                                                                                  311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   491
```

ద

à

g  $\delta$ d ð

ð

; TYPE: PRT ; ORGANISM: Homo sapiens US-10-163-866-40

			······································													
1113	296	1173		1293 356	1353 376	1413 396	1473 416	1533	436 1593	456	1647 476	1704	496			. USE
ACCATTAATGCTGAG	valLeuAsnileser	CTACTGGGAAATTTC          ThrPheGlyMetPhe	ATGAACGGTGGTGTG :::     LeuAsnAlaSerIle	CTTCCAGAAATCCTC      :::::    	STTTTGCACCCTTTG ::: PheAsnCysThrMet	FTCCTCAGTTTTGCC :::             ::: FyrPheSerPheSer	GATACAAATGCCCA 	TTTCCTTCACATGC	HECYSITECYSSER BGGATTGGCTTCGTC	 JeuileGlyileGly	TCTGACTGGAGTCCCTGCGTATTATCTCTTTATTATATGGGACAAGAAA     ::          aLeuSerGlyValProPheTyrPheMetGlyValTyrLeuProGluSerArgArg	-ACATTACAAATAATACTG	lllii SlnGlnLeuCysPhe			AND METHODS OF
TGGCCTACTTTACG	alAlaTyrTyrThr	CCTTTTCTGAGCGG      ::::::::::::::::::::::::::::::	CCTGCTTTGGCTCCJ	CTCGAGAGGGTCAC             erArgGluGlyHisI	TACCAGCTGTTATTC ::      ::::: leProAlaLeuLeul	ACAGTCTTTGAATT    :::   : heGlnLeulleAsnT	GGCTGATTTATCTT( 	TCATCCCAGCTTTG7	Nernerioileval ACCCATTAGTACAC	 spThrIleAsnSerI	 1yva	TAACCAGAACA5	  eThrArgGlyThrG			тне р53 Ратниах
TGTGCTGACAAATG	rleLeuThrAsnV	TGCAGTGGCAGTGA  -	CTTGTTGCCCTCT	ATTCTATGTTGCGT     :::    uPhePheValGlyS	CAAGCACACTCCTC :::       : uArgPheThrProI	CTCTGGAGACCTCG    ::: eValGluAspValP	GCTGGCAGTTGCTG     :::      YbeuServalvalG	CAAGGTGCCACTGT	unyspeuservark TTCCCTCTATTCGG	:    ::::::   ProLeuPheThrA	CCCTGCGTATTATCT       PropheTyrpheme	AATGTCAGAGAAAA	nValLeuAlaAlaI	AGAT 1725 	uAsp 503	66 FIBRS OF /163,866 96,076 28,605 38,733 57,253
AITGICACCAITGGCIAIGIGCIGACAAAIGIGGCCIACITIACGACCAITAAIGCIGAG	levalthrieuilefyrileieuthrasnvalalafyrfyrthrvalieuasnil	GAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC :::::::	TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGTG	TTGCTGTCTCCAGGTTATTCTAIGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC 	CCAIGATICATGTCGGCAAGCACACTCCTCTACAGCTGTTATTGTTTTGCACCCTTTG            :: :: ::       ::     :::: :: erMetileHisileGluargPheThrProlleProAlaLeuLeuPheAsnCysThrMet	ACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTTCCC 	AGGIGGCTTITIATIGGGCTGGCAGTIGCTGGGCTGATTATCTTCGATACAAATGCCCA 	GATATGCATCGTCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCTTCACATGC	27 J. S. L. C. L. C. L. C. L. C. L. C. L. C. L.		ATCACTCTGACTGGAGTCCCTGCGTATTATCTC-	CCCAGGTGGTTTAGAATAATGTCAGAGAAAAAAAACCAGA-	ProbeuPhelleArgAsnValLeuAlaAlaIleThrArgGlyThrGlnGlnLeuCysPhe	GAAGTTGTACCAGAAGAAGAT	CysValLeuThrGluLeuAsp	tion US 0300271 030027
1054 AT		1114 GA :: 297 AS	1174 TC    317 Se	1234 TT     337 Ph	1294 TC     357 Se	1354 AC 377 Al	1414 AG	1474 GA		437 Va	1594 AT		477 Pr		497 Cy	ULT 10  10-163-866-40  Gquence 40, Applicat Gquence 40, Applicat Gquence 40, Applicat Galerian information: APPLICANT: EXELIXIS, TITLE OF INVENTION: FILE REFERENCE: EXO2 CURRENT APPLICATION FRIOR FILING DATE: PRIOR FILING DATE: 2 PRIOR PELICATION NU PRIOR FILING DATE: 2 PRIOR PELICATION NU PRIOR PELING DATE: 2 PRIOR PELING DATE: 2 PRIOR PELING DATE: 2 PRIOR APPLICATION NU PRIOR PILING DATE: 2 PRIOR APPLICATION NU PRIOR PILING DATE: 2 PRIOR APPLICATION NU PRIOR PILING DATE: 2 PRIOR PILING DATE: 2 PRIOR PELING DATE: 2 PRIOR PELING DATE: 2 PRIOR PILING DATE: 2 PRIOR PELING DATE: 3 PRIOR PELING DATE: 3 PRIOR PELING DATE: 2 PRIOR PELING DATE: 3
δō		දු දු	da	75 Q	Qy	. Ko qa	දු දු	ر د		qq	Qy Dp	ζ	Д		Dþ	RESULT 10 US-10-163-866 SQUENCE 40 PUBLICATION TITLE REPER TITLE REPER CURRENT APPL PRIOR PILL PRIOR FILL PRIO

```
1054 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1114 GAGCTGCTTCCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC 1173
                                                                                                                                          453
                                                                                                                                                                                  513
                                                                                                                                                                                                                       573
                                                                                                                                                                                                                                                              633
                                                                                                                                                                                                                                                                        693
                                                                                                                                                                                                                                                                                                                        156
                                                                                                                                                                                                                                                                                                                                        ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGGCATAACTGTA 753
                                                                                                                                                                                                                                                                                                                                                       157 ProSerCysAspProProTyrLeuAlaCysArgLeuLeuAlaAlaAlaCysIleCysLeu 176
                                                                                                                                                                                                                                                                                                                                                                                   813
                                                                                                                                                                                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                                                                                                                                         873
                                                                                                                                                                                                                                                                                                                                                                                                                                            216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         256
                                                                                                                       26
                                                                                                                                                             96
                                                                                                                                                                                                  96
                                                                                                334 GAGAAAGTGCAGCTGAAGAGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC
                                                                                                                                                                            CystyrAlaGluLeuGlyThrThr1leThrLysSerGlyAlaSerTyrAlaTyr1leLeu
                                                                                                                                                                                                                                                                                                 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTTGGACGCTACATTCTGGAACCATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                             874 GGTCAAACGCAGAACTTTTAAAGACGCCTTTTCAGGAAGAAGTATTCAAGTATTACGCGGGTTG
                                                                                                                                                   57 AsnMetIleGlySerGlyIlePheValSerProLysGlyValLeuValHisThrAlaSer
                                                                                                                                                                                                                   514 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG
                                                                                                                                                                                                                                                          574 GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC
                                                                                                                                                                                                                                                                                                                                                                               754 GIGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGGATCCAGATTTTTCTTAACC
                                                                                                                                                                                                                                                                                                                                                                                                                      814 ITTTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA
                                                                                                                                        394 ACCATCATTGGAGCAGGAATCTTCATCTCCTAAGGGCGTGCTCCAGAACACGGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297 AspValLeuSerSerAspAlaValAlaValThrPheAlaAspGlnThrPheGlyMetPhe
                              Conservative:
Mismatches:
Indels:
                                                                           US-09-667-170A-440 (1-2239) x US-10-163-866-40 (1-515)
           Length:
Matches:
      6.64e-100
1156.50
69.16%
46.68%
28.07%
                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
Alignment Scores:
Pred. No.:
                                                                                                                                                                                                 77
                                                                                                                                                                                                                                        93
                                                                                                                                                                              454
                                                                                                                                                                                                                                                                                                   634
                                                                                                                                                                                                                                                                                                                                         694
                   Score:
                                                                                                 à
                                                                                                                   셤
                                                                                                                                        à
                                                                                                                                                       g
                                                                                                                                                                             \delta
                                                                                                                                                                                             g
                                                                                                                                                                                                               \overset{\sim}{\circ}
                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                          \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

9

489

80

549 100 609

```
101 GlyalaSerTyrAlaTyrIleLeuGluAlaPheGlyGlyPheLeuAlaPheIleArgLeu 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       610 TGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                               730 ATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 ThrLeuValGlnAspIlePheThrTyrAlaLysValLeuAlaLeuIleAlaValIleVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201 AlaGly1leValArgLeuGlyGlnGlyAlaSerThrHiSPheGluAsnSerPheGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               910 AGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATGCATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerSerPheAlaValGlyAspIleAlaLeuAlaLeuTyrSerAlaLeuPheSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTIGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |||||| :::||| :::||| 321 PheGlyGlyGlyLeuAsnAlaSerIleValAlaAlaAserArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGT
                                      310 GGAAGAGACGCCTTTTCAGGAAGAGAGAAAGTGCAGCTGAAGAGAAAGTCACTTTACTG
                                                                                                                                  41 AsnGlyValCysLeulleValGlyAsnMet1leGlySerGlyIlePheValSerProLys
                                                                                                                                                                                                              61 GlyValLeulleTyrSerAlaSerPheGlyLeuSerLeuValIleTrpAlaValGlyGly
                                                                                                                                                                                                                                                                                                                                                 GGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    670 CGCTACATTCTGGAACCATTTTTTATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          790 GCCCGGATCCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   850 CCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         970 GGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAAAACCCTGAAAAAAACCATTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGGATCTTTGTTGCCCTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITGGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCA
                                                                                                                                                                                                                                                                     490 GTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCT
                                                          370 AGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCTCCTAAG
                                                                                                                                                                                          GOCGIGCICCAGAACACGGGCAGCGIGGGCAIGICICTGACCAICTGGACGGIGIGIGGG
US-09-667-170A-440 (1-2239) x US-10-163-866-41 (1-511)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1210
                                                                                                                                                                                          430
                                                                                                                                                                                                                                                                                                                                                 550
                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δý
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ä
                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                    8
                                                                        g
                                                                                                                8
                                                                                                                                                임
                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USE
                                                                                              1353
                                                                                                                                                                                                                                                     1473
                                                                                                                                                                                                                                                                                                                               1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCACTCTGACTGGAGTCCCTGCGTATTATCTC-----TTTATTATATGGGACAAGAAA 1647
                                                                                                                                                                          1354 ACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC 1413
                                                                                                                                                                                                                                                                                                                                                                                                           CICTICAIGGIIGCCCTITICCCICIAITCGGACCCAITITAGIACAGGGAIIGGCTICGIC 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCAGGIGGITITAGAAIAAIGICAGAGAAAAIAACCAGA---ACAITACAAAIAAIACIG 1704
                                                                                                                                                                                                                                                                                         416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ||| ::: ||| ::: ProLeuPhelleArgAsnValLeuAlaAlaIleThrArgGlyThrGlnGlnLeuCysPhe 496
                                                                                                                    THE p53 PATHWAY AND METHODS OF
                                          397 TyrTrpPhePheValGlyLeuSerValValGlyGlnLeuTyrLeuArgTrpLySGluPro
                                                                                                                                                                                                                                                                                                                                                                                                                               :::|||:::||| ::: ||||::::||| 337 ValPheLeuVallleValProLeuPheThrAspThrIleAsnSerLeuIleGlyIleGly
                    TTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC
                                                                                                                                                                                              1414 AGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCCA
                                                                                                                                                                                                                                                                                                                               GATATGCATCGTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGC
                                                                                                                                                                                                                                                                                                                                                     LysargProArgProLeuLysLeuSerValPhePhePheProlleValPheCysIleCysSer
                                                                                              TCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     211
214
1109
33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OS-10-18586-41, Application US/10163866
Publication No. US20030027188A1
GENERAL INFORMATION:
TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE
FILE REFERENCE: EXC2-080C
CURRENT APPLICATION NUMBER: US 60/296,076
PRIOR APPLICATION NUMBER: US 60/298,605
PRIOR PILING DATE: 2001-06-05
PRIOR PILING DATE: 2001-06-05
PRIOR PILING DATE: 2001-10-10
PRIOR PELICATION NUMBER: US 60/328,605
PRIOR PILING DATE: 2001-10-12
PRIOR PILING DATE: 2001-10-2
PRIOR FILING DATE: 2001-06-05
PRIOR PILING DATE: 2002-02-15
PRIOR PILING DATE: 2002-02-15
PRIOR FILING DATE: 2002-02-15
PRIOR FILING DATE: 2002-02-15
PRIOR FILING DATE: 2002-02-15
PRIOR FILING DATE: 2002-02-15
PRIOR PILING DATE: 2002-02-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1705 GAAGTTGTACCAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                497 CysValLeuThrGluLeuAsp 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.51e-97
1131.50
68.00%
45.05%
27.46%
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-163-866-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-163-866-41
                                                          337
                                                                                                                                    357
                                                                                                                                                                                                                                                                                                                               1474
                                                                                                                                                                                                                                                                                                                                                                     417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    477
                                                                                                                                                                                                                                                                                                                                                                                                           1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            457
                                                                                                1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                         ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                       g
                      à
                                                      D
                                                                                              à
                                                                                                                              g
                                                                                                                                                                      ö
                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                   ò
```

1089

280

1029

789 180 849 200 606 220 969

140 729 160

699

1149

300

1209

320

1269

340

699 140 729 789

```
970 GGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAAACCATTCCC 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1150 TCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGGATCTTTGTTGCCCTCTCTGCTGC 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .210 TTTGGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGA 1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1330 GCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGT 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1450 ATTIATCTICGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATC 1509
                                                                                                                                                                                                                                                                                                                                                                   ::: ||| ||| :::::::
161 LeuAlaAlaAlaCysIleCysLeuLeuThrPheIleAsnCysAlaTyrValLysTrpGly 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         730 ATTACAGCTGTGGGCATAACTGTAGTGGTCCTAAATAGCATGAGTGTCAGCTGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               910 AGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATGCATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1270 GAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1390 CTTTTGAATTICCTCAGTTTTGCCAGGTGGCTTTTTTTTTGGGCTGGCAGTTGCTGGGCTG
61 GlyValLeuIleTyrSerAlaSerPheGlyLeuSerLeuValIleTrpAlaValGlyGly
                                                                            550 GGAGGICATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTC
                                                                                                                                                                                                                                           TGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGA
                                                                                                                                                                                                                                                                                                                                       CGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221 SerSerPheAlaValGlyAspIleAlaLeuAlaLeuTyrSerAlaLeuPheSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 GlyTrpAspThrLeuAsnTyrValThrGluGluIleLysAsnProGluArgAsnLeuPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1030 CTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAATGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281 TyrTyrThrValLeuAspMetArgAspIleLeuAlaSerAspAlaValAlaValThrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 AlaAspGlnIlePheGlyIlePheAsnTrpIleIleProLeuSerValAlaLeuSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  341 GluGlyHisLeuProAspAlaIleCysMetIleHisValGluArgPheThrProValPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     790 GCCCGGATCCAGATTTTCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   850 CCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1090 IACTITACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1510 CCAGCTTTGTTTTCCTTCACATGCCTCTTCATGCTTGCCCTTTCCCTCTATTCGGACCCA
                                                                                                                                                                                                                                           610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DP
Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                             ò
                                                                                             d
                                                                                                                                        ò
                                                                                                                                                                                      g
                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                  쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-16.3 966-42. Application US/10163866
| Publication No. US20030027188A1
| Sequence 42. Application US/10163866
| Publication No. US20030027188A1
| GENERAL INFORMATION.
| TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE
| TITLE DF INVENTION SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE
| CURRENT PELING DATE: 2002-06-05
| CURRENT PELING DATE: 2002-06-05
| PRIOR PAPLICATION NUMBER: US 60/236,076
| PRIOR PELING DATE: 2001-10-10
| PRIOR APPLICATION NUMBER: US 60/338,733
| PRIOR PILING DATE: 2001-10-2
| PRIOR PELING DATE: 2001-10-2
| PRIOR PELING DATE: 2002-02-15
| PRIOR FILING DATE: 2002-02-15
| NUMBER OF SEQ ID NOS: 54
| SEQ ID NO 42
| LENGTH: 511
| TYPE: PRT
| TYPE
                                                                                                                                                                                                             CCAGCITITGITITCCTTCACATGCCTCTTCATGGTTGCCCTTTTCCCTCTATTCGGACCCA 1569
                                                                                                                                                                                                                                                                                                             TITAGIACAGGGATIGGCITCGICATCACTCTGACTGGAGICCCTGCGIATTAICTCTTT 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USE
                    CTITICAATIICCICAGIITIIGCCAGGIGGCITTIIIATIIGGGCIGGCAGIIGCIGGGCIG
                                                                                                                    ATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATC 1509
                                                                                                                                                                                                                                                                                                                                                                                                      1630 ATT-----ATATGGGACAAGAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAACC 1683
                                             441 IleAsnSerLeulleGlylleAlaIleAlaLeuSerGlyLeuProPheTyrPheLeulle 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCGTGCTCCAGAACACGGGCAGCGTGGCATGTCTCTGACCATCTGGACGGTGTGTGGGG 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                      461 lieArgValProGluHisLysArgProLeuTyrLeuArgArgIleValGlySerAlaThr 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAAGAGGACCCTTTTCAGGAAGAGAGAAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTG 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  :::|||||||||:::||||
LeuTyrLeuArgTrpLysGluProAspArgProArgProLeuLysLeuSerValPhePhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41 AsnGlyValCysLeuIleValGlyAsnMetIleGlySerGlyIlePheValSerProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1684 AGAACATTACAAATAATA---CTGGAAGTTGTACCAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ||| |||||||:::::: ::: |||| ArgTyrLeuGlnValLeuCysMetSerValAlaAlaAlaGluMetAsp 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 511
214
109
149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-667-170A-440 (1-2239) x US-10-163-866-42 (1-511)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1131.50
68.00%
45.05%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51e-97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27.46%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-163-866-42
                                                                                                                                                                                                                                                             421
                                                                                                               1450
                                                                                                                                                               401
                                                                    381
                                                                                                                                                                                                             1510
                                                                                                                                                                                                                                                                                                             1570
                    1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               130
                                                               g
                                                                                                          ò
                                                                                                                                                        Dp
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
```

1089

240

220 696

200 909 1149

320

280

dd

ò

ద ò

```
1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1450 ATTTATCTTCGATACAAATGCCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATC 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITGGCICCAIGAACGGIGGIGIGITITGCIGICICCAGGIIAITCIAIGITGCGICICGA 1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1330 GCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGT 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCA 1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 341 GluGlyHisLeuProAspAlaIleCysMetIleHisValGluArgPheThrProValPro 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                  849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       461 ileArgValProGluHisLysArgProLeuTyrLeuArgArgIleValGlySerAlaThr 480
                                                                                                                                                                                                                                                    200
SerSerPheAlaValGlyAspIleAlaLeuAlaLeuTyrSerAlaLeuPheSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 GlyTrpAspThrLeuAsnTyrValThrGluGluIleLysAsnProGluArgAsnLeuPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 AlaAspGlnIlePheGlyIlePheAsnTrpIleIleProLeuSerValAlaLeuSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 SerLeubheAsnGlyIleMetAlaLeuIleTyrLeuCysValGluAspIlePheGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProlleValPheCysLeuCysThrIlePheLeuValAlaValProLeuTyrSerAspThr
                                                                                                                                                                                                                                                                                                                                             201 AlaGlyIleValArgLeuGlyGlnGlyAlaSerThrHisPheGluAsnSerPheGluGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTTTGAATTTCCTCAGTTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTTTTGGGACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1570 TTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          441 IleAsnSerLeuileGiyIleAlaileAlaLeuSerGlyLeuProPheTyrPheLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATT-----ATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAACC
                                                                                  730 ATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGC
                                                                                                                     90 GCCCGGAICCAGAITTICITAACCITTIGCAAGCICACACCAATICIGAIAAITAIAGIC
                                                                                                                                                                                                                                  CCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAAGACGCCTTTTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                            910 AGAGATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATGCATATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACTITIACGACCATTAATGCTGAGGAGCTGCTTTTCAAATGCAGTGGCAGTGACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAACATTACAAATAATA---CTGGAAGTTGTACCAGAAGAAGAT 1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
US-10-163-866-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1684
                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                               850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                    g
                                                                                                                                                                                               8
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                               ठ
                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                               ð
                                                                                                                                                                                                                                                                                                                                                     US-10-214-867A-11

JGSQUENCE 11, Application US/10214867A

Sequence 11, Application US/10214867A

Publication No. US2003014844A1

GENERAL INFORMATION:

APPLICANT: BNOU, HITCSHI

APPLICANT: RAND, YOSHIKATSU

TITLE OF INVENTION: SODIUM-INDEPENDENT SMALL NEUTRAL AMINO ACID

TITLE OF INVENTION: SODIUM-INDEPENDENT SMALL NEUTRAL AMINO ACID

TITLE OF INVENTION: SODIUM-INDEPENDENT SMALL NEUTRAL AMINO ACID

TITLE OF INVENTION: GENES THEREOF

TITLE OF INVENTION: UNMESE: THANSPORTING L- AND D-AMINO ACID

FILE REFERENCE: 57783 (71526)

CURRENT APPLICATION NUMBER: PCT/JP01/00031

PRIOR FILING DATE: 2001-01-09

PRIOR FILING DATE: 2001-01-09

PRIOR FILING DATE: 2001-01-09

PRIOR FILING DATE: 2000-02-07

NUMBER OF SEQ ID NOS: 17

SOFTWARE: PATENTIN Ver: 2.1

SEQ ID NO 11

LENGTH: 511
                                                                                                                                          1683
                          1570 TITAGTACAGGGAITGGCTTCGTCATCACTGTGACTGGAGTCCCTGCGTATTATCTCTTT 1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 TrpThrSerLeuLeullelleGluProThrSerGlnAlailelleAlaileThrPheAla 140
                                                          441 IleAsnSerLeulleGlyIleAlaIleAlaLeuSerGlyLeuProPheTyrPheLeulle 460
                                                                                                                                                                       ||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::|| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::|| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::|| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||| :::||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310 GGAAGAGGACGCTTTTCAGGAAGAGAAGTGCAGCTGAAGAGGAAAGTCACTTTACTG 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  370 AGGGGAGICTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCTCTAAG 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTC 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101 GlyAlaSerTyrAlaTyrIleLeuGluAlaPheGlyGlyPheLeuAlaPheIleArgLeu 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            570 CGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTC 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41 AsnGlyValCysLeuIleValGlyAsnMetIleGlySerGlyIlePheValSerProLys 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GOCOTICCAGAACACGGGCAGGGTAGGCATGTCTCTGACCATCTGGACGGTGTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            510 TGGGTGGAACTCCTCATAATACGCCCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGA
                                                                                                                                       ATT-----ATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAACC
                                                                                                                                                                                                                                                 1684 AGAACATTACAAATAATA---CTGGAAGTTGTACCAGAAGAAGAT 1725
                                                                                                                                                                                                                                                                                     ||| |||||||::::: :: :: ||| ArgTyrLeuGlnValLeuCysMetSerValAlaAlaAlaGluMetAsp 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                511
212
109
151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-667-170A-440 (1-2239) x US-10-214-867A-11 (1-511)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.16e-95
1111.50
67.58%
44.63%
26.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-214-867A-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            550
                                                                                                                                       1630
                                                                                                                                                                                               461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
```

Db

 $\stackrel{\sim}{\circ}$ 엄

ð g  $\delta$ QQ 8 Db ò 엄  $\delta$ 

```
913
                                                                                                                               208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            408
                                                                                   ò
                                                                                                                          셤
                                                                                                                                                                         à
                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
Sequence 43, Application US/10163866
Publication No. US20030027188A1
GENERAL INFORMATION:
TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE
FILE REFRENCE: EX02-080C;
CURRENT APPLICATION NUMBER: US 60/296,076
FRICK APPLICATION NUMBER: US 60/296,076
FRICK APPLICATION NUMBER: US 60/298,605
FRICK APPLICATION NUMBER: US 60/328,605
FRICK APPLICATION NUMBER: US 60/328,605
FRICK PILING DATE: 2001-10-10
FRICK FILING DATE: 2001-10-22
FRICK PILING DATE: 2002-02-15
FRICK PILING DATE: 2002-02-15
FRICK PILING DATE: 2002-02-15
FRICK PILING DATE: 2002-02-15
FRICK FILING DATE: 2002-02-15
F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           262 AAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGACGCCCTTTTCAGGAAGAGACGCC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCTCCTAAAGGGCGTGCTCCAG 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACGGTGTGGGGGTCCTGTCACTA 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTAC 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTC 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerTyrValLysAspilePheGlyGlyLeuAlaGlyPheLeuArgLeuTrpIleAlaVal 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCATAATACGCCCTGCAGCTACTGCTGATATCCCTGGCATTTGGACGCTACATTCTG 681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACCATITITITATICAAIGIGAAAICCCIGAACTIGCGAICAAGCICAITACAGCIGIG 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CYSLeuLeuLeuLeuTrTrpValAsnCysSerValArgTrpAlaThrArgValGln 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      802 AITTICITAACCITITGCAAGCICACAGCAATICIGAIAAITAIAGICCCIGGAGITAIG 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||||::: ||||||
LysLysHisProGly------GlyGlyGluSerAspAlaSerProGluAla 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ||||||||
|GlySerGlyGlyGlyGlyValAlaLeuLysLysGluIleGlyLeuValSerAlaCysGly 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTCAGGAAGAGAAAGIGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCATAACTGTAGTGATGGTCCTAAATAGCATGTGTGAGCTGGAGCGCCCGGGATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    535
220
103
161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-667-170A-440 (1-2239) x US-10-163-866-43 (1-535)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.03e-94
1101.50
65.52%
44.62%
26.74%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-163-866-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
973 TGGTTTTACCTCAACTTTGTTACTGAAGAAGTAGAAAACCCTGAAAAAACCATTCCCCTT 1032
                                                                                                                                                                                                                                                                                                                                                                                    1033 GCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTAC 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAG 1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1333 GTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTT 1392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: EXELIXIS, INC.
TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE FILE REPRERENCE: EXO2-080C
CURRENT APPLICATION NUMBER: US/10/163,866
CURRENT FILING DATE: 2002-06-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCT 1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1453 TATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCA 1512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1513 GCTTTGTTTTCCTTCACAIGCCTCTTCAIGGTTGCCCTTTCCCTCTAITCGGACCCCAITT 1572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            367
                                                                                                                                    227
                                                                                                                                                                                       972
                                                                                                                                                                                                                                          247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     288 ValThrAlaMetSerProGlnGluLeuLeuAlaSerAsnAlaValAlaValThrPheGly 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1633 ATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAATAACCAGAACATTA 1692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            427
|||::: |||||||::: GlnIleCysLysGlyGluTyrPheTrpLeuGluProLysAsnAlaPheGluAsnPheGln
                                                                                                                                                                                                                       CAGCTAATTAAAGGTCAA----ACGCAGAACTTTAAAGACGCCTTTTCAGGA---AGA
                                                                                                                                                                                  GATICAAGTATIACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATGCATATGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1093 TITACGACCATTAATGCTGAGGAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ||| :::|||||| :::|||||| 328 GlyGlyValAsnGlySerLeuPheThrSerSerArgLeuPhePheAlaGlyAlaArgGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 428 IlelleTyrLeuLeuPheTrpAlaPheLeuLeuValPheSerLeuTrpSerGluProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ValLeuArgTrpLysLysProAsplleProArgProlleLyslleAsnLeuPhePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1573 AGTACAGGGATTGGCTTCGTCATCACTGGAGTCCCTGCGTATTATCTCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              448 ValCysGlyIleGlyLeuAla1leMetLeuThrGlyValProValTyrPheLeuGlyVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          468 TyrTrpGlnHisLysProLysCysPheSerAspPheIleGluLeuLeuThrLeuValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCCTCTCGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1393 TIGAATTICCICAGITITGCCAGGIGGCTITITATIGGGCIGGCAGITGCIGGGCIGAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1693 CAAATAATACTGGAAGTTGTA---CCAGAAGAAGATAAG 1728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      488 GlnIysMetCysValValValTyrProGluValGluArg 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-163-866-44;
; Sequence 44, Application US/10163866; Publication No. US20030027188A1; GENERAL INFORMATION:
```

```
: 231 secs
                                                                                           1033 (
                                                                                                                                                                                                                                                                                                                                                                                  1393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search co
                                           δ
                                                                 g
                                                                                         ò
                                                                                                             Ob
                                                                                                                                        à
                                                                                                                                                             g
                                                                                                                                                                                  \stackrel{>}{\circ}
                                                                                                                                                                                                          임
                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                    du
                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                       QQ
                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                         262 AAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGACGCCTTTTCAGGAAGAGAGACGCC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                          441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  502 TTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATAAGAAATCTGGAGGTCATTAC 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88 ValGlyAlaLeuCysTyrAlaGluLeuGlyValThrIleProLysSerGlyGlyAspTyr 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACACGGGCAGCGTGGGCATGTCTGTGCACGAGGGTGTGTGGGGGTCTGTCACTA 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACCATTTTTTATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTG 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTITCTTAACCTTTTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATG 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ||||::: ||||||:::
208 Gln1leCysLysGlyGluTyrPheTrpLeuGluProLysAsnAlaPheGluAsnPheGln 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATTCAAGTATTACGCGGTTGCCACTGGCTTTTTATTATGGAATGTATGCATATGCTGGC 972
                                                                                                                                                                                                                                                                                                                                                                   27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                67
                                                                                                                                                                                                                                                                                                                                                                                                                  47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87
                                                                                                                                                                                                                                                                                                                                                                                                        |||||||
|GlySerGlyGlyGlyGlyValAlaLeuLySLySGluIleGlyLeuValSerAlaCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysLeuLeuLeuThrTrpValAsnCysSerSerValArgTrpAlaThrArgValGln
                                                                                                                                                                                                                                                                                                                                                                                         TITICAGGAAGAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATCTCCTAAGGGCGTGCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    562 ACATATATTTGGAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCATAATACGCCCTGCAGCTACTGCTGATATCCCTGGCATTTGGACGCTACATTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             742 GGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysLysHisProGly------dlyGlyGluSerAspAlaSerProGluAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCTAATTAAAGGICAA----ACGCAGAACTTTAAAGACGCCTTTTCAGGA---AGA
                                                                                                                                                                                                                                   535
220
103
161
9
                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                 US-09-667-170A-440 (1-2239) x US-10-163-866-44 (1-535)
| PRIOR APPLICATION NUMBER: US 60/296,076 |
| PRIOR FILING DATE: 2001-06-05 |
| PRIOR PRILIAGATION NUMBER: US 60/328,605 |
| PRIOR APPLICATION NUMBER: US 60/338,733 |
| PRIOR PILING DATE: 2001-10-10 |
| PRIOR PILING DATE: 2001-10-22 |
| PRIOR FILING DATE: 2002-02-15 |
| PRIOR FILING DATE: 2002-02-15 |
| PRIOR FILING DATE: 2002-02-15 |
| NUMBER OF SEQ ID NOS: 54 |
| SOFTWARE: PATENTING DATE: 2002-02-15 |
| SEQ ID NO 44 |
| LENGTH: 535 |
| TYPE PRI |
| ORGANISM: Homo sapiens |
| US-10-163-866-44
                                                                                                                                                                                                                          1.03e-94
1101.50
65.52%
44.62%
                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                     Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                                                                                                                                              28
                                                                                                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   168
                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108
                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                             연
                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

```
973 IGGITTTACCICAACTTIGITACTGAAGAAGTAGAAAAACCCTGAAAAAACCATTCCCCTT 1032
                                                                                                                                                                                                                                                                       1152
                                                                                                                                                                                                                                                                                                                                                                   1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTTTGTTTTCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTT 1572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .573 AGTACAGGGAITGGCTTCGTCATCACTGACTGGAGTCCCTGCGTATTATCTCTTTATT 1632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1453 TATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCA 1512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1633 ATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATAACCAGAAACATTA 1692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              387
GluProAspIleGlyLeuValAlaLeuAlaPheLeuGlnGlySerPheAlaTyrGlyGly 247
                                                                                                                                                                                                                                                                                                                                                                                                                327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |||| :::|||
TyrTrpGlnHisLysProLysCysPheSerAspPheIleGluLeuLeuThrLeuValSer 487
                                                                                                    1093 TITACGACCATTAATGCTGAGGAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCT
                                                                                                                                                                                                                                                                                                                                                                                          308 GluLysLeuLeuGlyValMetAlaTrpIleMetProlleSerValAlaLeuSerThrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1333 GTTATTGTTTTTGCACCCTTTGACAATGATGCTCTTCTTCTGGAGACCTCGACAGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   368 LeuleuPheThrCysIleSerThrLeuLeuMetLeuValThrSerAspMetTyrThrLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTAC
                                                                                                                                                                                                                                                                                             288 ValThrAlaMetSerProGlnGluLeuLeuAlaSerAsnAlaValAlaValThrPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1213 GGCTCCATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1273 GGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGAATTTCCTCAGTTTTGCCCAGGTGGCTTTTTTTTTGGGCTGGCAGTTGCTGGGCTGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               448 ValCysGlylleGlyLeuAlaIleMetLeuThrGlyValProValTyrPheLeuGlyVal
                                                                                                                                                                                                                                                                                                                                                              1153 GAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTTGTTGCCCCTCCTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATAATACTGGAAGTTGTA---CCAGAAGAAGATAAG 1728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |||| :::: ::: |||||| || :::::: GlnLysMetCysValValValTyrProGluValGluArg 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       completed: October 31, 2003, 11:39:13
```

App.

App]:

Appl Appl Appl Appl Appl

Appl Appl Appl Appl

```
43,
              Seguence
Seguence
Seguence
                                                                                           Sequence
Sequence
Sequence
Sequence
                                                                                                                                            Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                              Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence (Sequence (Sequen
                                                     Seguence
Seguence
Seguence
                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                   Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
          US-09-996-243-134
US-09-620-312D-897
US-09-620-312D-897
US-09-121-12D-897
US-09-121-12D-897
US-09-121-16A-7
US-08-483-278-7
US-09-820-101-3
US-09-964-469-3
US-09-9736-457-992
US-09-9736-457-992
US-08-983-998-1
US-08-983-998-1
US-08-983-998-1
US-08-983-998-1
US-08-983-998-1
US-08-984-19-974-1
US-08-984-18-19-947-1
US-08-984-18-19-947-1
US-08-984-18-19-947-1
US-08-984-18-19-947-1
US-08-984-18-19-947-1
US-08-984-18-19-947-1
US-08-984-18-288-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-018-584A-35
US-09-257-179-23
US-08-256-918A-3
US-09-150-864A-3
US-09-687-147-3
US-08-202-056-8
US-08-202-056-8
US-08-202-056-8
US-08-205-697A-6
US-08-205-697A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1493
1880
2636
2636
5510
5852
8353
22067
36651
36651
36651
84495
                                                                                                                                                                                                                                                                                                   985
112229
12229
12229
12229
12242
12422
1304
1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1460
1618
1618
1628
1748
1753
1753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23010
23010
23010
23010
23010
23010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2454
3129
4092
4092
4129
4129
4931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6405
14707
15602
22481
 \sigma
0.11 \\ 0.11 \\ 0.12 \\ 0.13 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 0.14 \\ 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Appl
App
                                                                                   // Search time 114 Seconds
(without alignments)
8668.920 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                1 ggaggttgaagtgagcagag.............
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 252
Sequence 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                    1139956
                                                                                                                                                                                                                                                                                                                                                                         Issued Patents NA:*

(cgn2_6/ptodata/2/ina/5A_COMB.seq:*

(cgn2_6/ptodata/2/ina/5E_COMB.seq:*

(cgn2_6/ptodata/2/ina/6A_COMB.seq:*

(cgn2_6/ptodata/2/ina/RECOMB.seq:*

(cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*

(cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
         GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -09-495-050A-236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -09-475-316A-26
-09-620-312D-819
                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                               569978 seqs, 220691566 residues
                                                                                                                                                                                                                                                                                                                                                   summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                          - nucleic search, using sw model
                                                                                    October 30, 2003, 07:20:58
                                                                                                                                                                                                        0.09
                                                                                                                                                                                         OLIGO_NUC
Gapop_60.0 , Gapext
                                                                                                                                                                                                                                                                                                                                                 Post-processing: Listing first 1000
                                                                                                                                    US-09-667-170A-440
2239
                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   737
738
15788
40000
162450
72928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               333
11288
111288
111288
111288
115088
18651
36651
36651
2462460
2462460
246240
246240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          668
704
913
950
1338
                     Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4440000000
000000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                         4 0 W 4 D 0
                                                                                                                                                    score:
                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Word size :
                                                           nucleic
                                                                                                                                                                                                                                                                                                                                                                          Database :
                                                                                                                                                                   Seguence:
                                                                                                                                                                                                                               Searched:
                                                                                                                                      Title:
Perfect
                                                                                   Run on:
```

No.

000

υ

υ

oligo.rni
_*
0
4
4,
ı
ゐ
0
~
н
1
7
į.
ũ
ĭ
σ .
ō
ĭ
2
,

Sequence 11, Appl Sequence 49, Appl Sequence 49, Appl Sequence 49, Appl Sequence 49, Appl Sequence 1, Appl Sequence 1, Appli	Sequence 117, App Sequence 117, App Patent No. 5198342 Sequence 27, Appli Sequence 3, Appli Sequence 1, Appli Sequence 18, Appli	Sequence 181, App Sequence 181, App Sequence 3, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 2, Appli	Sequence 1, Appli Sequence 2, Appli Sequence 72, Appli Sequence 72, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 23, Appli Sequence 3, Appli Sequence 3, Appli Sequence 1, Appli Sequence 13, Appli Sequence 13, Appli Sequence 13, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli
US-09-165-922A-11 US-09-489-847-64 US-08-454-557C-49 US-08-450-673C-49 US-08-450-673C-49 US-08-517111A-49 US-09-625-040-1 US-09-635-040-1 US-09-043-937A-1	US-08-487-113D-117 US-08-487-113D-117 US-08-48-113D-117 US-09-904-615-27 US-08-297-633A-1 US-08-297-633A-1 US-08-392-935-8 US-08-392-935-8 US-08-392-935-8 US-08-392-935-8 US-08-615-170-20 US-08-615-170-20 US-08-615-170-1	US-09-338-907-181 US-09-338-907-181 US-09-809-494A-3 US-09-352-302-3 US-09-020-464-7 US-09-020-464-7 US-09-020-465-7 US-09-020-685-7 US-09-020-685-7 US-08-278-6351-1 US-08-444-258B-1 US-08-445-593-40 US-08-445-593-40 US-08-706-054A-1 US-08-706-054A-1 US-08-706-054A-1 US-09-313-299-1	3 US-08-808-032-1 2 US-08-808-032-1 3 US-08-902-833-4 4 US-09-618-106-72 1 US-08-129-129-2 4 US-09-813-817-1 4 US-09-813-817-1 5 US-09-813-817-1 6 US-09-978-197-1 1 US-08-27-345-1 5 US-08-27-345-1 6 US-09-594-506-33 7 US-09-594-506-33 8 US-09-594-506-33 1 US-09-115-934A-1 2 US-08-818-514-1 2 US-08-818-514-1 4 US-09-115-934A-2 3 US-09-115-934A-2 4 US-09-1175-1 6 US-09-1175-1 6 US-09-1175-1 7 US-09-1175-1 8 US-09-1175-1 8 US-09-1175-1 9 US-09-118-934A-1 1 US-09-118-934-1 1 US-09-118-934-1 1 US-09-118-934-1
7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		00000000000000000000000000000000000000	22222222222222222222222222222222222222
			000000000000000000000000000000000000000
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	\$
0 175 0 175 0 176 0 177 0 180 0 181 181 183		ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	0 00 0 000 0000 0000 0000 0000 0000 0000
4 0 1 0 0 0 1 1 6 6 0 1 0 0 0 0 0 0 0 0 0	988, 2210	Sequence 115, App Sequence 13, Appl Sequence 13, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 18, Appli Sequence 18, Appli Sequence 10, Appli Sequence 6, Appli Sequence 50, Appli Sequence 17, Appli	Sequence 17, Appl Sequence 17, Appl Sequence 11, Appl Sequence 10, Appl Sequence 10, Appl Sequence 126, App Sequence 11, Appl Sequence 11, Appl Sequence 21, Appl Sequence 22, Appl Sequence 23, Appl Sequence 29, Appl Sequence 29, Appl Sequence 29, Appl Sequence 29, Appl Sequence 24, Appl Sequence 24, Appl Sequence 24, Appl Sequence 27, Appl Sequence 3, Appli Sequence 9, Appli
			US-08-352-902D-17 US-09-265-503B-17 US-09-265-503B-17 US-09-183-266A-16 US-08-906-769-126 US-08-906-769-126 US-08-906-616-126 US-08-906-616-126 US-09-012-431-126 US-09-012-431-126 US-09-012-431-126 US-09-012-431-126 US-09-012-431-126 US-09-012-431-126 US-09-012-431-126 US-09-012-431-126 US-09-012-631-126 US-09-256-126-11 US-08-388-310-491 US-08-389-33-53 US-09-256-976-21 US-09-268-976-21 US-09-256-976-21 US-09-256-976-21 US-09-256-976-21 US-09-256-976-21 US-09-256-976-21 US-09-256-976-21 US-09-256-976-21 US-09-256-976-21 US-09-268-976-21 US-09-268-976-21 US-09-289-247-42 US-09-369-247-42 US-09-369-347-92 US-09-369-347-92 US-09-268-588-9
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22604 22604 225240 22440 22440 22440 22440 22440 22440 1113		6118 66718 66718 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77589 77599 77599 77599 77599 77599 7759
	000000000000000000000000000000000000000		
000000000000000000000000000000000000000	00000000000000000000000000000000000000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
101 102 102 103 106 106 106 109 109			0 0 1 148 148 148 148 148 148 148 148 148 1

Sequence 9, Appli Sequence 1, Appli Sequence 27, Appli Sequence 27, Appli Sequence 1, Appli Sequence 12, Appli Sequence 12, Appli Sequence 14, Appli	4474	1 m L m	m - i - i	7 28	וֹה הׁ וּ		4 4 4	า้ต่	m rì r	-i m m	ักกัก	ກໍຜິດ	שׁ מִי	24,0	วักเล	์ ה ה	, i	17,	א הי ה	, ,	J 4, U	າ້ຕ້	79,	79	. מ	ຕີຕີ	4 6	וחחה
US-09-357-206A-9 US-09-423-744A-1 US-09-277-457-27 US-09-679-729-27 US-09-357-206A-1 US-09-705-299-12	US-09-608-285A-42 US-09-557-800C-42 US-09-608-285A-59 US-09-679-299A-18 US-09-078-294-12	US-08-310-356-36 US-08-310-356-36 PCT-US92-06300-1 US-09-740-035-3	US-09-810-671-3 US-09-499-522-1 US-09-326-480A-1	US-09-564-805-28 US-09-341-587-7 US-09-729-995-3	US-08-323-443B-1 US-09-801-191A-3	US-08-814-095-7	US-US-306-591B-19 PCT-US93-06251-19 US-09-749-588-3	US-09-749-588-3 US-09-301-665-3	US-09-301-665-3 US-09-922-445-1	US-US-292-542A-1 US-09-735-934A-3 US-09-735-934A-3	US-10-060-332-3 US-10-060-332-3	US-09-146-033-5 US-09-146-053-6 US-08-965-048-5	US-08-965-048-6 US-09-146-053-3	US-09-146-053-3 US-09-146-053-4 US-09-901-061-3	US-09-801-881-3 US-09-801-861-3 US-08-658-136-2	US-08-658-136-1 US-09-813-133A-3	US-09-338-907-1	US-09-218-207-1 US-09-338-907-179	US-09-218-20/-1/9 US-09-800-960-3 178-09-861-896-3	US-09-009-913-1	US-09-078-090-3 US-09-078-294-4: US-09-078-294-3	US-09-076-294-3 US-09-811-469-3	US-09-797-906-3 US-08-781-891-79	US-09-618-166-79	US-09-245-041-5	US-09-759-359A-3 US-09-759-359A-3	US-09-791-211-10 US-09-798-096-10	US-09-754-250-3 US-09-754-250-3 US-09-741-150-3
0.8 10881 4 0.8 12143 4 0.8 12146 4 0.8 12286 4 0.8 12597 4 0.8 12597 4	.8 14747 .8 14747 .8 15977 .8 17000	.8 19011 .8 19557 .8 19736	.8 21234 .8 23187 .8 26016	.8 26664 .8 28720 .8 29629	.8 31571 .8 32654	.8 35060	.8 35100 .8 35100	.8 36159 .8 36741	.8 36741 .8 38653	.8 43950 .8 43950	.8 43950 .8 43950	.8 45546 .8 45716	.8 45989 .8 50000	.8 50000 8 50000	. 8 53332 8 53332 8 53526	.8 53577 .8 55827	.8 56516 .8 56516	.8 56520 .8 56520	8 62804	8 72928	8 80246 80546	8 83450	.8 84495 .8 87350	8 87350 8 87543	8 90050	8 90541 8 90541	8 98844	8 111282 8 111282 8 111282
	5 6 6 6 6 1 1 1 1 1 1	, o o o	5 5 5 5 H H H	ത ത ത പ പ പ	999	n on o	n on on	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	U 11 1	ч <del>С</del> Ц	999	1100	000	1 H F	100	19 19	6 G G	200	) H C	9 5 5	9 6 6	000	6 T T	ტ ტ	000	6 F	1 1 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	000 HH-
0 001	0 327 0 328 0 329 0 330	9 (1) (1) (1)	(1) (1) (1)	0 338 338 340	C 341 342	חרחר	0 346 346 347	mm	m m c	) 0 0 0 0 0 0 0 0 0 0 0 0 0	u u ı	0 8 6 20 2	wwc	363	G 365 G 365	m m	370	372 372	374	376	ገጥለ	380	mm	383 384	3000	386 C 387	388 388	390
3, Appl 3, Appl Appli Appli Appli Appli Appli Appli App	d ·d ·d el e																											
$\omega \omega \omega \omega \omega \omega \omega \omega$	4 4 4 4 4	16.44	-	$\neg$	900	4 m r	$\neg$		446	101	400	100	400	7 70 6	តែក	55	ผีผีผ	equence 3	ωα	ωα	equence 3	equence 1	equence 3		equence 1	equence 3	equence 7	wwr
US-08-468-036-33 Sequence 3. US-08-376-841-33 Sequence 3. US-09-541-782-3 Sequence 3. US-09-723-820-3 Sequence 3. US-08-866-340-1 Sequence 1. US-09-357-206A-8 Sequence 8. US-09-40-103-655 Sequence 8.	US-08-456-200B-2 Sequence 2 US-08-456-200B-2 Sequence 2 US-08-930-055A-2 Sequence 2 US-08-781-710 Sequence 7 US-09-791-211-11 Sequence 1	US-09-618-166-70 Sequence 1 US-08-485-588-1 Sequence 1 US-08-485-55-1 Sequence 1	US-08-480-751-1 Sequence 1 US-08-943-986-1 Sequence 1 US-08-353-784-1 Sequence 1	US-08-484-719B-1 Sequence 1 US-08-484-159-1 Sequence 1 US-09-033-33-3 Sequence 3	US-09-033-33-3 Sequence 3 US-09-033-556-2 Sequence 2 US-09-033-556-2 Sequence 2	US-09-614-495-3 Sequence 3 US-09-614-495-3 Sequence 3	US-08-380-916-1 Sequence 1 US-08-380-916-1 Sequence 1	US-08-721-690-1 Sequence 1	US-08-691-581-1 Sequence 1 US-08-891-581-1 Sequence 1 US-08-033-33-2 Sequence 1	US-09-033-33-2 Sequence 1 US-09-033-556-1 Sequence 1	US-09-033-556-1 Sequence 1 US-09-614-495-2 Sequence 2 IR-09-614-495-2 Sequence 2	US-09-474-699-9 US-09-474-699-9 Sequence 9	US-08-206-176-1 Sequence 1 US-08-480-784-20 Sequence 1 TG-08-483-E63-50	US-08-483-002-20 Sequence 20 US-08-483-554B-20 Sequence 20	US-08-488-011B-20 Sequence 20 US-08-850-727-20 Sequence 20	PCT-US95-10202-20 Sequence 20 PCT-US95-10203-20 Sequence 20	PCT-US95-10220-20 Sequence 20 Sequence 20 Sequence 21	03-03-341-30/-3 US-09-341-30/-3 US-09-167-681-45 Commence 3	US-09-608-285A-8 Sequence R US-09-350-836B-8 Semience R	US-09-370-265-8 Sequence 8	US-09-801-874-3 Sequence 2 US-09-345-217-2 Semience 2	US-09-423-744A-19 Sequence 1	US-08-652-265-3 Sequence 3	US-08-652-265-5 Sequence 5 US-08-652-265-7 Sequence 7	US-08-834-497A-1 Sequence 1	US-08-834-497A-3 Sequence 3 US-08-834-497A-5 Sequence 5	US-08-834-497A-7 Sequence 7 US-09-503-444A-1 Sequence 1.	US-09-503-444A-3 Sequence 3 US-09-503-444A-5 Sequence 5 US-09-503-444A-7 Semience 7
Sequence 3. Sequence 3. Sequence 3. Sequence 3. Sequence 1. Sequence 1. Sequence 1. Sequence 8. Sequen	119 3 US-08-456-200B-2 Sequence 2 109 4 US-08-950-055A-2 Sequence 2 108 3 US-08-930-055A-2 Sequence 2 108 3 US-09-731-211-11 Sequence 7	208 4 US-09-618-166-70 Sequence 1 275 1 US-08-485-588-1 Sequence 1 275 1 US-08-444-565-1 Sequence 1	775 2 US-08-480-751-1 Sequence 1 775 2 US-08-943-986-1 Sequence 1 775 3 US-08-353-784-1 Sequence 1	775 3 US-08-484-719B-1 Sequence 1 775 4 US-08-484-159-1 Sequence 1 875 3 US-09-033-33-3 Sequence 3	335 3 US-09-033-333-3 Sequence 3 354 US-09-033-556-2 Sequence 2 354 US-09-033-556-2 Sequence 2	335 4 US-09-614-495-3 Sequence 3	336 1 US-08-380-916-1 Sequence 1	36 3 US-08-721-690-1 Sequence 1 38 3 US-08-721-690-1 Sequence 1	20 3 US-08-891-381-1 Sequence 1 36 3 US-08-891-581-1 Sequence 1 313 3 US-09-033-333-2	36 4 US-09-033-556-1 Sequence 1	36 4 US-09-033-556-1 Sequence 1 136 4 US-09-614-495-2 Sequence 2 136 4 US-09-614-495-2 Sequence 2 136 4 US-00-614-495-3	36 4 US-09-474-699-9 Sequence 9	43 1 US-08-206-176-1 Sequence 1 69 1 US-08-480-184-20 Sequence 2 69 1 US-08-483-483-50 Sequence 2	69 1 US-08-483-5548-20 Sequence 21 69 1 US-08-483-5548-20 Sequence 21	69 1 US-08-488-011B-20 Sequence 20	69 5 PCT-US95-10202-20 Sequence 20	69 5 PCT-US95-10220-20 Sequence 20 99 4 US-09-62-312D-299 Sequence 20 99 105-09-62-312D-299 Sequence 20	20 4 US-09-197-908-3 Sequence 3 Sequence 3 120 4 US-09-197-908-3 Sequence 3	65 4 US-09-608-285A-8 Sequence 8 65 4 US-09-350-836B-8 Semience 8	65 4 US-09-370-265-8 Sequence 8	21 3 US-09-345-217-2 Segmence 2	0504 4 US-09-423-744A-19 Sequence 1005	0825 3 US-08-652-265-3 Sequence 3	0825 3 US-08-652-265-5 Sequence 5 0825 3 US-08-652-265-7 Sequence 7	0825 3 US-08-834-497A-1 Sequence 1	0825 3 US-08-834-497A-3 Sequence 3 0825 3 US-08-834-497A-5 Sequence 5	0825 3 US-08-834-497A-7 Sequence 7, 0825 3 US-09-503-444A-1 Sequence 1.	25 3 US-09-503-444A-3 Sequence 3. US-3 US-09-503-444A-5 Sequence 5. US-3 US-09-503-444A-7 Sequence 5. US-09-503-444A-7
183 1 US-08-468-036-33 Sequence 3. 183 2 US-08-376-843-33 Sequence 3. 184 4 US-09-722-820-3 Sequence 3. 184 3 US-09-722-820-3 Sequence 3. 184 3 US-09-723-820-3 Sequence 3. 184 4 US-09-377-206A-8 Sequence 5. 185 4 US-09-377-206A-8 Sequence 5. 185 4 US-09-377-206A-8 Sequence 5. 185 2 US-09-20-20-3122-555 Sequence 5. 185 2 US-09-3173-575 Sequence 5. 185 2 US-09-31	9 0.8 419 3 US-08-456-200B-2 Sequence 2 9 0.8 5109 4 US-08-950-055A-2 Sequence 2 9 0.8 5109 4 US-08-950-055A-2 Sequence 2 9 0.8 5208 3 US-08-731-891-70 Sequence 7 9 0.8 5208 4 US-09-731-11 Sequence 7	9 0.8 5208 4 US-09-618-166-70 Sequence 1 9 0.8 5275 1 US-08-485-588-1 Sequence 1 9 0.8 5275 1 US-08-484-565-1 Sequence 1	9 0.8 5275 2 US-08-480-751-1 Sequence 1 9 0.8 5275 2 US-08-353-986-1 Sequence 1 9 0.8 5275 3 US-08-353-784-1 Sequence 1	9 0.8 5275 3 US-08-484-1199-1 Sequence 1 9 0.8 5275 4 US-08-484-159-1 Sequence 1 9 0.8 5835 3 US-09-033-33-3 Sequence 3	9 0.8 5835 3 US-09-033-333-3 Sequence 3 9 0.8 5835 4 US-09-033-556-2 Sequence 2 9 0.8 5835 4 TS-09-033-556-2 Sequence 2	9 0.8 5835 4 US-09-614-495-3 Sequence 3 9 0.8 5835 4 US-09-614-495-3 Sequence 3	9 0.8 5836 1 US-08-380-916-1 Sequence 1 9 0.8 5836 1 US-08-380-916-1 Sequence 1	9 0.8 5836 3 US-08-721-690-1 Sequence 1 9 0.8 5836 3 US-08-721-690-1 Sequence 1 9 0.8 5836 3 US-08-721-690-1 Sequence 1	9 0.8 5836 3 US-08-891-581-1 Sequence 1 9 0.8 5836 3 US-08-891-581-1 Sequence 1 9 0.8 5836 3 US-08-033-333-2 Sequence 1	9 0.8 5836 3 US-09-033-233-2 Sequence 1 9 0.8 5836 4 US-09-033-556-1 Sequence 1	9 0.8 5836 4 US-09-033-556-1 Sequence 1 9 0.8 5836 4 US-09-614-4955-2 Sequence 2 9 0.8 5836 4 US-00-614-406-2	0.8 5836 4 US-09-474-699-9 Sequence 9 0.8 5836 4 US-09-474-699-9 Sequence 9 Sequence 9	9 0.8 5943 1 US-08-206-176-1 Sequence 1 9 0.8 6769 1 US-08-480-7484-20 Sequence 2 1 0 8 676 1 105-08-480-755-20	9 0.8 6769 1 US-08-487-002-20 Sequence 20 9 0.8 6769 1 US-08-487-20 Sequence 20	9 0.8 6769 1 US-08-488-011B-20 Sequence 20 0.8 6769 3 US-08-850-727-20 Sequence 20	9 0.8 6769 5 PCT-US95-10202-20 Sequence 20 9 0.8 6769 5 PCT-US95-10203-20 Sequence 20	9 0.8 6/69 5 PCI-US95-10220-20 Sequence 20 9 0.8 6799 4 US-09-620-3120-299 Sequence 20 9 0.8 7379 4 TG-00-341-E97-E	5 0.8 8220 4 US-05-341-361-5 Sequence 3 9 0.8 8220 4 US-05-797-908-3 Sequence 3 9 0.8 8451 3 IIS-06-147-45 Seminand	9 0.8 9365 4 US-09-608-285A-8 Sequence 8 0.8 9365 4 US-09-350-836B-8 Secuence 8	9 0.8 9365 4 US-09-370-265-8 Sequence 8	9 0.8 9377 4 US-09-801-874-3 Sequence 3 0.8 9721 3 US-09-345-217-2 Secuence 2	9 0.8 10504 4 US-09-423-744A-19 Sequence 1	0.8 10825 3 US-08-052-265-1 Sequence 3	9 0.8 10825 3 US-08-652-265-5 Sequence 5 9 0.8 10825 3 US-08-652-265-7 Sequence 7	9 0.8 10825 3 US-08-834-497A-1 Sequence 1	0.8 10825 3 US-08-834-497A-5 Sequence 5	9 0.8 10825 3 US-08-834-497A-7 Sequence 7 9 0.8 10825 3 US-09-503-444A-1 Sequence 1	9 0.8 10825 3 UG-09-503-444A-3 Sequence 3. 9 0.8 10825 3 UG-09-503-444A-5 Sequence 5. 9 0.8 10825 3 UG-09-503-444A-7 Semienre 7.

ന
2003
0
Ø
11
••
10
••
60
0
41
Nov
Φ

us-09-667-170a-440.oligo.rni

Sequence 47, App Sequence 42, App Sequence 222, App Sequence 3, Appl Sequence 55, Appl Sequence 40, Appl Sequence 40, Appl Sequence 40, Appl Sequence 246, Appl Sequence 187, Appl Sequence 187, Appl	Sequence 189, App Sequence 297, App Sequence 296, App Sequence 23, App Sequence 23, Appl Sequence 151, Appl Sequence 151, Appl	Sequence 7, Appli Sequence 152, Appli Sequence 137, App Sequence 80, Appl Sequence 80, Appl Sequence 80, Appl Sequence 80, Appl Sequence 80, Appl Sequence 80, Appl Sequence 80, Appl	Sequence 80, Appl Sequence 80, Appl Sequence 171, Appl Sequence 171, Appl Sequence 67, Appl Sequence 191, Appl Sequence 171, Appl Sequence 171, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli	Sequence 15, Appl Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 42, Appli Sequence 42, Appli Sequence 144, Appl Sequence 2011, Appl Sequence 2011, Apple Sequence 2421, Apple Sequence 360, Apple Sequence 360, Apple Sequence 361, A	Sequence 31, Appl Sequence 17, Appl Sequence 10, Appl Sequence 10, Appl Sequence 1, Appl Sequence 2, Appl Sequence 2, Appl Sequence 56, Appl Sequence 67, Appl Sequence 7, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 36, Appl Sequence 36, Appl Sequence 36, Appl Sequence 9, Appli Sequence 9, Appli
US-09-004-730A-47 US-08-981-799A-47 US-08-981-799A-47 US-08-698-805-3 US-09-385-982-40 US-09-288-143-35 US-09-288-143-35 US-09-288-246 US-09-205-258-246	1 US-09-149-476-189 1 US-09-372-422A-45 1 US-09-328-475C-297 1 US-08-389-548-23 2 US-08-936-165A-151 1 US-08-936-165A-151 1 US-08-936-165A-151 1 US-08-936-165A-151	US-08-288-630-2 US-09-328-475C-152 US-09-328-475C-152 US-08-916-769-80 US-08-906-616-80 US-08-817-795-80 US-08-619-075A-80 US-09-012-431-80 US-09-012-431-80	US-08-906-613-80 US-09-328-475C-171 US-09-328-475C-171 US-09-227-357-65 US-09-328-475C-191 US-09-328-475C-191 US-09-247-375C-191 US-08-460-040-1 US-08-460-040-1 US-08-562-311-1	US-09-328-143-25 US-08-322-719-7 US-08-470-925-7 US-08-471-613-7 ECT-US93-10443-7 US-09-904-615-36 US-09-904-615-36 US-09-328-350-77144 US-09-14-0010-2421 US-09-641-638-360 US-09-641-638-361 US-09-641-638-361	4 US-00-328-475C-31 4 US-09-328-475C-71 4 US-09-328-475C-71 4 US-09-328-475C-72 4 US-09-328-475C-72 5 US-09-328-475C-107 4 US-09-522-714-21 3 US-09-522-714-21 3 US-09-149-476-22 3 US-09-149-476-22 3 US-09-149-476-22 3 US-09-342-084-7 4 US-09-327-316A-63 4 US-09-227-357-41 4 US-09-227-357-41 6 US-09-615-128-369 1 US-07-945-288-9 1 US-08-462-831-9
				0000 0000 0000 0000 0000 0000 0000 0000 0000	100094 100094 100094 100094 100094 100099 100099 100099 1000999 10009 1000
					00000000000000000000000000000000000000
8888888888					8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
0 0 44444468 207444444444444444444444444444444444444	0 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	000 44444444444 0000000000000000000000	0 0 4 4 4 4 4 4 N N N N N N N N N N N N N N		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Sequence 3, Appl. Sequence 16, Appl. Sequence 24, Appl. Sequence 17, Appl. Sequence 17, Appl. Sequence 10, Appl. Sequence 1, Appl. Sequence 1, Appl.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	O 4 E . O . E C .	125 125 125 125 125 125 125 125 125 125	745545568826	Sequence 70, Appl. Sequence 70, Appl. Sequence 70, Appl. Sequence 102, Appl. Sequence 102, Appl. Sequence 20, Appl. Sequence 20, Appl. Sequence 14, Appl. Sequence 140, Appl.
US-09-818-512-3 US-09-128-155-16 US-09-128-155-16 US-09-66-10B-24 US-09-804-471A-3 US-09-128-155-17 US-09-877-17A-10 US-09-877-17A-10 US-09-539-333D-1 US-09-539-333D-1 US-09-539-333D-1 US-09-539-333D-1 US-09-679-409-1	US-09-679-409-1 Sequence 1, US-09-679-409-1 Sequence 1, US-09-18-452A-1 Sequence 1, US-09-284-657-14 Sequence 14 US-09-284-627-15 Sequence 14 US-08-284-627-23 Sequence 23 US-08-799-464A-34 Sequence 35 US-08-799-464A-34 US-08-799-464A-	US-08-849-701-9 US-08-849-701-9 US-09-3397-987-25 US-09-332-766A-23 US-08-623-906A-9 US-08-623-906A-9 US-08-332-766A-20 US-08-332-766A-20 US-08-332-76A-20 US-08-332-76A-20 US-08-332-76A-20 US-08-332-76A-20 US-08-332-76A-20 US-08-332-76A-20 US-09-423-23-23 US-09-423-23-23 US-09-118-554-59 US-09-118-554-59 US-09-118-554-59	US-09-118-627-59 US-09-602-877A-59 US-09-602-877A-59 US-09-618-184A-22 US-09-117-080-13 US-09-117-080-13 US-08-471-329-13 US-08-915-142-13 US-09-702-705-76 US-09-328-475C-122 US-09-328-475C-122 US-09-357-141-55	US-09-533-889-55 Sequence 55 US-09-702-705-892 Sequence 89 US-09-702-705-892 Sequence 89 US-09-702-705-892 Sequence 89 US-09-679-2934-98 Sequence 98 US-09-328-475C-215 Sequence 21 US-09-328-475C-215 Sequence 21 US-09-328-475C-190 Sequence 21 US-09-328-475C-190 Sequence 21 US-09-328-475C-190 Sequence 21 US-09-328-475C-190 Sequence 21 US-09-040-984-70 Sequence 70 US-09-123-912-70 US-09-123-912-70 US-09-123-912-70 US-09-123-912-912-912-912-912-912-912-912-912-912	US-09-480-84A-70 US-09-542-615A-70 US-09-542-615A-70 US-09-527-135-102 US-09-227-135-102 US-09-227-135-102 US-09-227-29-20 US-09-220-132-102 US-09-220-132-102 US-09-20-258-84 US-09-20-258-84 US-09-20-258-84 US-09-20-293-1 US-08-20-393-1 US-08-20-393-1 US-08-20-393-1 US-08-20-393-1 US-08-20-393-1 US-08-20-140 US-09-11-156A-47 US-09-11-156A-47
8 116592 4 US-09-818-512-3 Sequence 3, 8 152331 3 US-09-128-155-16 Sequence 16 16993 4 US-09-66-108-24 Sequence 24 174493 4 US-09-66-108-24 Sequence 24 176773 3 US-09-128-155-17 Sequence 17 18 197496 4 US-09-128-155-17 Sequence 17 18 202011 4 US-09-539-331D-1 Sequence 17 18 319608 4 US-09-539-331D-1 Sequence 17 18 319608 4 US-09-539-331D-1 Sequence 17 18 319608 4 US-09-679-400-1	8 12508 4 US-09-679-409-1 Sequence 1, Sequence 2, US-09-284-627-2, Sequence 2, US-08-799-464A-3, Sequence 3, Seque	235 2 US-08-849-701-9 Sequence 9, 248 4 US-09-337-7487-25 Sequence 25, 301 2 US-09-258-143 Sequence 14, 301 2 US-09-332-766A-23 Sequence 14, 350 2 US-08-332-766A-29 Sequence 29, 350 2 US-08-332-766A-20 Sequence 20, 358 2 US-08-332-766A-20 Sequence 20, 359 4 US-09-423-23 Sequence 23, 373 4 US-09-423-23 Sequence 15, 382 4 US-09-4118-554-59 Sequence 15, 382 4 US-09-118-554-59	8 382 4 US-09-118-627-59 Sequence 59 8 382 4 US-09-602-877-59 Sequence 59 8 382 2 US-08-602-877-59 Sequence 59 8 382 2 US-08-602-877-59 Sequence 59 8 412 3 US-09-018-5848-22 Sequence 22 8 433 1 US-08-117-080-13 Sequence 13 8 433 2 US-08-915-142-13 Sequence 13 8 461 4 US-09-736-457-76 Sequence 13 8 467 4 US-09-328-475C-122 Sequence 12 8 472 3 US-09-357-141-55 Sequence 55	8 472 4 US-09-533-889-55 Sequence 558 472 4 US-09-702-705-892 Sequence 558 472 4 US-09-702-705-892 Sequence 898 472 4 US-09-142-080-55 Sequence 898 472 4 US-09-142-080-55 Sequence 988 488 4 US-09-58-98-98 Sequence 11, 498 4 US-09-38-475C-215 Sequence 21, 498 4 US-09-38-475C-215 Sequence 21, 498 4 US-09-38-475C-215 Sequence 21, 498 556 5 PCT-US95-09765-2 Sequence 22, 498 536 3 US-09-040-984-70 Sequence 70, 498 536 4 US-09-484-70 Sequence 70, 498 536 4 US-09-482-70 Sequence 70, 498 536 4 US-09-4	sequence 70 Sequence 70 Sequence 70 Sequence 116 Sequence 100 Sequence 20 Sequence 316 Sequence 114 Sequence 116 Sequence
9 0.8 116592 4 US-09-818-512-3 Sequence 3, 0.8 116592 4 US-09-128-155-16 Sequence 16, 0.8 152331 3 US-09-128-155-16 Sequence 16, 0.8 174493 4 US-09-804-471A-3 Sequence 24, 0.8 174594 4 US-09-804-471A-1 Sequence 17, 0.8 197496 4 US-09-877-177A-10 Sequence 17, 0.8 319608 4 US-09-539-3330-1 Sequence 13, 0.8 319608 4 US-09-539-3330-1 Sequence 1, 0.8 319608 4 US-09-539-3330-1 Sequence 1, 0.8 319608 4 US-09-539-330-1	9 0.8 139608 4 US-09-679-409-1 Sequence 1, Sequence 2, Sequence 1, Sequence 1, Sequence 2, Sequence 2, Sequence 2, Sequence 2, Sequence 2, US-09-284-627-2, Sequence 2, Sequence 2, Sequence 3, Sequen	8 0.8 235 2 US-08-849-701-9 Sequence 9, 8 0.8 248 4 US-09-397-787-25 Sequence 25, 8 0.8 300 4 US-09-205-228-143 Sequence 14, 8 0.8 301 2 US-08-332-766A-23 Sequence 14, 8 0.8 334 2 US-08-623-966A-9 Sequence 29, 8 0.8 358 2 US-08-332-766A-20 Sequence 20, 8 0.8 359 4 US-09-30-988A-15 Sequence 23, 8 0.8 373 4 US-09-300-988A-15 Sequence 15, 8 0.8 382 US-09-300-988A-15 Sequence 15, 8 0.8 382 US-09-300-988A-15 Sequence 15, 8 0.8 382 US-09-318-554-59	0.8 382 4 US-09-118-627-59 Sequence 59 8	0.8 472 4 US-09-533-889-55 Sequence 55 0.8 472 4 US-09-702-705-892 Sequence 55 0.8 472 4 US-09-702-705-892 Sequence 89 0.8 472 4 US-09-142-080-55 Sequence 89 0.8 472 4 US-09-142-080-55 Sequence 89 0.8 472 4 US-09-480-51-1 Sequence 98 0.8 498 4 US-09-480-51-1 Sequence 11.8 Sequence	8         536         4         US-09-480-847.70         Sequence 70           8         536         4         US-09-542-618.70         Sequence 70           8         545         4         US-09-527-149         Sequence 70           8         545         4         US-09-227-149         Sequence 170           8         568         1         US-09-227-20         Sequence 100           8         568         1         US-09-227-20         Sequence 20           8         568         1         US-09-227-20         Sequence 20           8         573         4         US-09-227-20         Sequence 20           8         568         2         US-09-227-20         Sequence 20           8         568         2         US-09-225-28         Sequence 20           8         610         3         US-09-205-258-84         Sequence 36           8         610         3         US-09-205-258-84         Sequence 14           8         610         3         US-09-005-258-84         Sequence 14           8         610         3         US-09-007-25-140         Sequence 14           8         610         3         US-09-012-441-140<

ednence ednence ednence ednence ednence	ednence ednence ednence ednence	equence equence equence equence equence equence	ednence ednence ednence ednence ednence ednence	equence equence equence equence equence	equence equence equence equence equence equence equence	ednence ednence ednence ednence ednence ednence ednence ednence ednence	Sequence 368, App Sequence 1, Appli Sequence 1, Appli Sequence 14, Appli Sequence 36, Appli Sequence 36, Appli Sequence 66, Appli Sequence 66, Appli Sequence 66, Appli Sequence 66, Appli Sequence 66, Appli Sequence 66, Appli	equence equence equence equence equence equence equence
							US-09-96-243-368 US-09-961-825-1 US-08-561-825-1 US-08-956-182-14 US-09-284-768A-3 US-09-369-247-36 US-09-369-247-36 US-09-322-200-66 US-09-232-200-66 US-09-232-197-66	
							2223331 223331 223331 223331 2233321 23338 23388 23388 23388 23388 23388 23388 23388	
	888888 HHHHH	x & & & & & & & & & & & & & & & & & & &	& & & & & & & & & & & & & & & & & & &	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	& & & & & & & & & & & & & & & & & & &		0 00 00 00 00 00 00 00 00 00 00 00 00 0	
0 612 614 614 619 619 619	622 622 623 623 623 623 623	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 6 6 6 6 6 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0000	
e 9, Appli e 9, Appli e 11, Appli e 12, Appl e 10, Appl e 10, Appl e 1, Appli	Appli Appli 8, App Appli Appli Appli	App App Appli Appli App	Appli Appli Appli Appli Appli Appli	Appl Appl Appli Appli Appli Appli	ppli ppli ppli ppli ppli App	ppli ppli ppli ppli ppli ppli ppli ppli	Appl Appli Appli Appli Appli Appli Appli 8, App	App App App App Ppli Ppli
Sequence Seq Sequence Sequence Sequence Sequence Sequence Sequence Sequence	equence 1, equence 5, equence 100 equence 1, equence 5,	equence 33: equence 18: equence 8; equence 1; equence 10: equence 10:	4,400,000,000	equence 3, equence 13 equence 80 equence 5, equence 6, equence 5,	0,4,4,4 H,4,8	Sequence 1, Sequen	0000045	equence 1. equence 7. equence 7. equence 2. equence 2. equence 1. equence 1. equence 1. equence 4. equence 4. equence 4.
US-08-461-441-9 PCT-US93-0818-9 US-08-08-18-5 US-09-461-474-11 US-05-594-506-23 PCT-US95-06406A-10 US-08-45-296-1	US-09-242-859A-1 Sequence 17, US-09-242-859A-5 Sequence 5, US-09-615-192A-108 Sequence 110 US-09-523-899A-1 Sequence 110 US-09-527-058-5 Sequence 17, US-09-527-058-5 Sequence 5, US-08-527-058-5 Sequence 5, US-08-257-058	US-09-149-476-180 Sequence 35: US-09-620-312D-767 Sequence 76: US-08-884-324-8 Sequence 76: US-09-501-115-1 Sequence 1, US-09-522-217-105 Sequence 10: US-09-522-217-105 Sequence 10:	US-08-421-822-1 Sequence 1, US-08-421-823-1 Sequence 1, US-08-419-009-29 Sequence 2, US-08-265-087-3 Sequence 3, US-08-965-688-3 Sequence 3, US-08-965-688-3 Sequence 3, US-08-260-173-3 Sequence 3, U	US-09-489-847-13 Sequence 3, US-09-205-258-80 Sequence 80 US-09-924-703-5 Sequence 5, US-09-492-308A-6 Sequence 5, US-09-404-296B-5 Sequence 5, US-08-553-888A-2 Sequence 2,	US-08-467-948A-5 Sequence 5, US-08-467-947A-5 Sequence 5, US-08-467-947A-5 Sequence 5, US-08-860-656B-1 Sequence 2, US-09-801-874-1 Sequence 4, US-09-801-874-1 Sequence 1, US-09-149-476-311 Sequence 1, US-09-149-476-311 Patent No. 5 183884-1	US-07-978-895-1 Sequence 1, US-08-249-112-1 Sequence 1, US-08-249-112-1 Sequence 1, US-08-473-119-1 Sequence 1, US-08-473-119-1 Sequence 1, US-09-600-846-1 Sequence 1, US-09-620-312D-1049 Sequence 1, US-09-820-002-1 Sequence 3, US-09-820-002-1 Sequence 3	US-08-189-1548-24 US-08-466-0478-24 US-08-466-0478-24 US-08-945-296-2 US-08-945-296-2 US-08-948-509-4 US-09-389-681-178 US-09-389-681-178 US-09-389-381-178 US-09-389-388-178 US-09-389-388-178 US-09-389-388-178 US-09-433-8268-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-438-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-433-828-178 US-09-438-178 US-09-	US-09-04-287A-178 Sequence 1.05-07-779-890-7 Sequence 7.05-07-779-890-7 Sequence 7.05-07-179-890-7 Sequence 7.05-09-149-476-224 Sequence 2.05-09-028-366-1 Sequence 1.05-08-897-340-4 Sequence 1.05-08-897-340-4 Sequence 1.05-08-897-340-4 Sequence 1.05-08-897-340-4 Sequence 1.05-08-252-329-4 Sequence 4.05-09-252-329-4
172 1 US-08-461-441-9 172 5 PCT-US93-08518-9 208 3 US-08-9461-471-1 211 4 US-09-594-506-23 213 5 PCT-US95-06406A-10 246 3 US-08-455-296-1 246 3 US-08-405-112-1	248 4 US-09-242-859A-1 Sequence 17, 248 4 US-09-242-859A-5 Sequence 5, 248 4 US-09-151-192A-108 Sequence 10, 274 4 US-09-523-899A-1 Sequence 11, 256 4 US-09-527-058 5, 256 Sequence 5, 256 4 US-09-27-058 5, 256 5, 257-27	312 4 US-09-149-476-180 Sequence 35: 316 4 US-09-149-476-180 Sequence 76: 316 4 US-09-620-312D-767 Sequence 76: 334 3 US-08-884-324-8 Sequence 17: 339 4 US-09-501-115-1 Sequence 10: 351 1 US-07-947-130-1	351 1 US-08-421-822-1 Sequence 1, 105-08-421-823-1 Sequence 1, 105-08-421-823-1 Sequence 1, 105-08-421-823-1 Sequence 1, 105-08-265-087-3 Sequence 3, 105-08-621-493-3 Sequence 3, 105-08-621-493-3 Sequence 3, 105-08-65-688-3 Sequence 3, 105-08-665-688-3 Sequence 3, 105-08-665-6	310 4 US-09-100-209-3 Sequence 3, 2010 4 US-09-200-209-3 Sequence 80 3178 4 US-09-205-258-80 Sequence 80 3195 4 US-09-924-703-5 Sequence 5, 430 4 US-09-492-3088A-6 Sequence 6, 431 4 US-08-553-888A-2 Sequence 2, 466 1 US-08-553-888A-2	474 2 US-08-467-947A-5 Sequence 5, 474 3 US-08-467-947A-5 Sequence 5, 481 3 US-08-667-947A-5 Sequence 5, 488 2 US-08-812-871-2 Sequence 2, 488 2 US-08-812-871-2 Sequence 2, 497 4 US-09-461-325-48 Sequence 4, 526 4 US-09-016-434-1464 Sequence 1, 526 4 US-09-016-434-1464 Sequence 1, 531 4 US-09-149-476-311 Sequence 3, 41 6 5183884-1 Patent No. 8	542 1 US-07-978-895-1 Sequence 1, 542 1 US-08-249-112-1 Sequence 1, 542 1 US-08-249-112-1 Sequence 1, 542 2 US-08-475-352-1 Sequence 1, 542 5 PCT-US95-06556-1 Sequence 1, 542 5 PCT-US95-0656-1 Sequence 1, 542 5 US-09-000-846-1 Sequence 1, 542 0S-09-820-002-1 Sequence 1, 543 US-09-820-002-1 Sequence 1, 553 US-09-820-002-1 Sequence 1, 553 US-09-820-002-1 Sequence 3, 553 US-09-820-0	389-5648-24 Sequence 24 466-0478-24 Sequence 24 465-0478-24 Sequence 24 405-112-2 Sequence 2 247-155-72 Sequence 7 389-681-178 Sequence 17 389-681-178 Sequence 17 389-338-178 Sequence 17 389-88-178 Sequence 17 433-8268-178 Sequence 17 433-8268-18	665 4 US-09-044-28/A-1/8 Sequence 1. 674 1 US-07-779-890-7 Sequence 7. 674 5 PCT-US93-05640-7 Sequence 7. 674 5 PCT-149-476-224 Sequence 7. 695 4 US-09-149-476-299 Sequence 2. 696 3 US-09-28-366-1 Sequence 1. 696 4 US-09-885-811-1 Sequence 1. 607 2 US-08-85-811-1 Sequence 1. 608 3 US-09-252-329-4 Sequence 1.
8 1172 1 US-08-461-441-9 8 1172 5 PCT-US93-08518-9 8 1201 8 US-08-94-51-5 8 1201 4 US-09-594-506-23 8 1213 5 PCT-US95-06406A-10 8 1246 3 US-09-465-112-1	8 1248 4 US-09-242-859A-1 Sequence 17, 8 1248 4 US-09-242-859A-5 Sequence 5, 8 1248 4 US-09-61-195A-108 Sequence 1.018 1274 4 US-09-61-195A-108 Sequence 1.018 1296 4 US-09-523-899A-1 Sequence 1.018 1296 4 US-09-527-0588-5 Sequence 5, 8 1296 4 US-09-374-0588-5 Sequence 5, 8 1296 4 US-09-374-0588-5 Sequence 5, 8 1296 4 US-09-374-0588-5 Sequence 5, 8 1296 4 US-09-374-058-5 Sequence 5, 9 1296 4 US-09-378-058-5 Sequence	23.28-476-1353 Sequence 35.38-1376-3535 Sequence 35.38-1316 4 US-09-620-312D-767 Sequence 76: 8 1334 3 US-08-884-324-8 Sequence 76: 8 1339 4 US-09-501-115-1 Sequence 10: 8 1347 4 US-09-522-217-105 Sequence 10: 8 1347 4 US-09-522-217-105 Sequence 10: 8 1347 4 US-09-522-217-105 Sequence 10: 8 1351 1 US-07-947-130-1	8 1351 1 US-08-411-822-1 Sequence 1, 1 US-08-411-823-1 Sequence 1, 1 US-08-411-823-1 Sequence 1, 1 US-08-419-009-29 Sequence 1, 1 US-08-265-087-3 Sequence 3, 1 US-08-265-087-3 Sequence 3, 1 US-08-621-493-3 Sequence 3, 1 US-08-965-688-3 Sequence 3	1370 4 US-U9-20U-50-59-5 Sequence 3, 1378 4 US-U9-205-258-80 Sequence 80 1378 4 US-09-205-258-80 Sequence 80 1395 4 US-09-924-703-5 Sequence 5, 18 1430 4 US-09-492-3088-6 Sequence 5, 1466 1 US-08-553-888A-2 Sequence 2,	8 1474 2 US-08-467-948A-5 Sequence 5, 8 1474 2 US-08-467-947A-5 Sequence 5, 8 1481 3 US-08-860-656B-1 Sequence 5, 8 1488 2 US-08-812-812-8 Sequence 2, 8 1488 2 US-08-812-812-48 Sequence 2, 8 157 4 US-09-461-325-48 Sequence 4, 9 15.26 4 US-09-016-434-1464 Sequence 1, 8 157 4 US-09-016-434-1464 Sequence 1, 8 157 4 US-09-149-476-311 Partent No. 8 1541 6 5183884-1 Partent No.	18 1542 1 US-07-978-895-1 Sequence 1, 18-1542 1 US-08-249-112-1 Sequence 1, 18-1542 1 US-08-249-112-1 Sequence 1, 18-1542 2 US-08-473-119-1 Sequence 1, 18-1542 2 US-08-475-352-1 Sequence 1, 18-1542 5 PCT-US95-06556-1 Sequence 1, 18-155 2 US-09-000-846-1 Sequence 1, 18-155 4 US-09-820-002-1 Sequence 1, 18-155 4 US-09-820-002-1 Sequence 1, 18-155 4 US-09-820-002-1 Sequence 3, 18-1	627 3 US-08-389-564B-24 Sequence 20 627 3 US-08-366-047B-24 Sequence 20 655 2 US-08-945-296-2 Sequence 20 655 1 US-08-945-112-2 Sequence 20 655 1 US-08-548-509-4 Sequence 20 665 4 US-09-247-155-72 Sequence 7 665 4 US-09-389-681-178 Sequence 17 665 4 US-09-338-178 Sequence 17	.8 1652 4 US-09-604-287A-178 Sequence 1.8 1674 1 US-07-779-890-7 Sequence 7.8 1674 1 US-07-779-890-7 Sequence 7.8 1674 1 US-07-779-890-7 Sequence 7.8 1694 5 PCT-US93-05640-7 Sequence 7.8 1695 4 US-09-149-476-224 Sequence 2.8 1696 3 US-09-149-476-299 Sequence 2.8 1696 3 US-09-028-366-1 Sequence 1.8 1696 3 US-09-383-811-1 Sequence 1.8 1700 2 US-08-887-340-4 Sequence 4.8 1700 3 US-09-252-329-4 Sequence 4.4
3 0.8 1172 1 US-08-461-441-9 3 0.8 1172 5 PCT-US93-085-8-9 3 0.8 1191 2 US-08-68-715-5 8 0.8 1208 3 US-09-461-474-11 8 0.8 1211 4 US-09-594-506-23 9 0.8 1213 5 PCT-US95-06406A-10 1246 2 US-08-455-29-1 8 0.8 1246 3 US-09-405-112-1	3 0.8 1248 4 US-09-242-859A-1 Sequence 1, 8 0.8 1248 4 US-09-242-859A-5 Sequence 5, 8 0.8 1248 4 US-09-615-192A-108 Sequence 1, 8 0.8 1274 4 US-09-523-899A-1 Sequence 1, 8 0.8 1296 4 US-09-527-058-5 Sequence 5, 8 0.8 1296 4 US-09-527-058-55 Sequence 5, 8 0.8 1296 4 US-09-527-058-55 Sequence 5, 8 0.8 1315 4 US-09-527-058-55 Sequence 2, 8 0.8 1315 4 US-09-527-058-55 Sequence 2, 9 0.8 1315 4 US-09-527-058-55	8 0.8 1316 4 US-09-18-476-180 Sequence 35: 8 0.8 1316 4 US-09-620-312D-767 Sequence 76: 8 0.8 1334 3 US-08-884-324-8 Sequence 76: 8 0.8 1339 4 US-09-501-115-1 Sequence 10: 8 0.8 1347 4 US-09-501-115-1 Sequence 10: 8 0.8 1347 4 US-09-521-717-105 Sequence 10:	8 0.8 1351 1 US-08-421-822-1 Sequence 1, equence 1, us-08-421-823-1 Sequence 1, us-08-421-823-1 Sequence 1, us-08-419-009-29 Sequence 1, us-08-265-087-3 Sequence 3, us-08-265-087-3 Sequence 3, us-08-265-088-3 Sequence 3, us-08-265-088-3 Sequence 3, us-08-265-088-3 Sequence 3, us-08-265-088-3 Sequence 3, us-08-265-073-3 Sequence 3, us-08-265-073-3 Sequence 3, us-08-266-173-3 Sequence 3, us-08	9 0.8 1370 4 US-09-00-599-3 Sequence 3, 0.8 1373 4 US-09-205-258-80 Sequence 80 3 0.8 1373 4 US-09-205-258-80 Sequence 80 3 0.8 1395 4 US-09-924-703-5 Sequence 5, 3 0.8 1430 4 US-09-492-308A-6 Sequence 6, 3 0.8 1431 4 US-08-553-888A-2 Sequence 5, 3 0.8 1466 1 US-08-553-888A-2	3 0.8 1474 2 UG-08-467-948A-5 Sequence 5, 8 1474 3 UG-08-467-948A-5 Sequence 5, 8 1474 3 UG-08-467-947A-5 Sequence 5, 8 148 3 UG-08-860-656B-1 Sequence 1, 8 0.8 1488 2 UG-08-812-871-2 Sequence 2, 8 0.8 1487 4 UG-09-461-325-48 Sequence 4, 8 0.8 1526 4 UG-09-016-874-1 Sequence 1, 8 0.8 1526 4 UG-09-016-434-1464 Sequence 1, 8 0.8 1537 4 UG-09-149-476-311 Patent No. 8 0.8 1537 4 UG-09-149-476-311 Patent No.	9 0.8 1542 1 US-07-978-895-1 Sequence 1, 1542 1 US-08-249-112-1 Sequence 1, 1542 1 US-08-249-112-1 Sequence 1, 1542 1 US-08-249-112-1 Sequence 1, 1542 1 US-08-473-119-1 Sequence 1, 1542 2 US-08-475-352-1 Sequence 1, 1542 2 US-09-0556-1 Sequence 1, 1542 2 US-09-00-846-1 Sequence 1, 1542 2 US-09-00-3120-1049 Sequence 1, 1542 4 US-09-220-3124 Sequence 1, 1543 4 US-09-222-334 Sequence 1, 1543 4 US-09-222-334 Sequence 2, 1543 4 US-09-222-334 Sequence 2, 1543 4 US-09-222-334 Sequence 2, 1543 4 US-09-222-334 Sequence 3, 1543 4 US-09-222-323-34 Sequence 3, 1543 4 US-09-222-334 Sequence 3, 1543 4 US-09-222-3234 Sequence 3, 1543 4 US-09-222-334 Sequence 3, 1543 4 US-09-222-324 Sequence 3, 1543 4 US-09-222-324 Sequence 3, 1543 4 US-09-225-334 Sequence 3, 1543 4 US-09-225-334 Sequence 3, 1543 4 US-09-225-334 Sequence 3, 1543	8 1627 2 US-08-389-564B-24 Sequence 24 1627 2 US-08-945-296-2 Sequence 24 1655 2 US-08-945-296-2 Sequence 24 1655 2 US-08-945-296-2 Sequence 24 1659 1 US-08-548-509-4 Sequence 24 1659 1 US-08-247-155-72 Sequence 27 1655 4 US-09-247-155-72 Sequence 17 1655 4 US-09-247-155-72 Sequence 17 1655 4 US-09-389-681-178 Sequence 17 1655 4 US-09-339-381-178 Sequence 17 1655 4 US-09-339-381-178 Sequence 17 1655 4 US-09-433-826B-178 Sequence 17 1655 4 US-09-4	8 0.8 1652 4 0.5-09-604-287A-178 Sequence 1.9 1 0.8 1674 1 0.5-07-79-890-7 Sequence 7.9 1 0.5-07-79-890-7 Sequence 7.9 1 0.5-07-79-890-7 Sequence 7.9 1 0.8 1674 5 PCT-0893-05640-7 Sequence 7.9 1 0.8 1695 4 0.5-09-149-476-224 Sequence 2.9 0.8 1695 4 0.5-09-149-476-229 Sequence 1.9 0.8 1696 3 0.5-09-149-476-299 Sequence 1.9 0.8 1700 2 0.5-09-835-811-1 Sequence 1.9 0.8 1700 3 0.5-09-252-329-4 Sequence 4.9 1700 3 0.5-09-252-329-4 Sequence 4.9 1700 3 0.5-09-252-329-4

1112441111	44.00.000000000000000000000000000000000		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	sequence 5, Appli sequence 3, Appli Sequence 1, Appli Sequence 1, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 5, Appli Sequence 5, Appli Sequence 68, Appli Sequence 1, Appli Sequence 1, Appli Sequence 5, Appli Sequence 1, Appli Sequence 3, Appli
	US-09-122-12 US-09-644-28 US-09-045-63 US-08-045-63 US-08-444-25 US-08-999-92 US-08-461-81 PCT-US94-088 PCT-US95-018			4 US-008-684-672-5 1 US-08-684-672-23 1 US-09-734-030-3 1 US-07-767-135-1 1 US-07-841-652-1 1 US-08-451-777A-7 2 US-08-998-008-7 2 US-09-981-777A-7 4 US-09-816-703A-1 3 US-09-383-630-5 3 US-09-383-630-5 3 US-09-816-703A-1 1 US-08-812-813-68 2 US-09-976-255-5 3 US-08-812-813-68 1 US-08-817-68 3 US-09-817-68 3 US-09-817-68 3 US-09-817-68 3 US-09-817-813-83 4 US-09-077-3548-3 4 US-09-026-039-3
8 8 8 8 4 4 4 4 4 4 4 4 6 8 8 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	# # # # # # # # # # # # # # # # # # #	5 6 6 1 3 5 6 6 1 3 5 6 6 1 3 5 6 8 4 7 5 6 8 4 7 6 6 1 3 8 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7	7277 7277 7620 7620 7620 7676 7676 7676
			<i></i>	
& & & & & & & & & & & & & & & & & & &	2	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		
111111111111	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Sequence 7, Appli Sequence 9, Appli Sequence 4, Appli Sequence 2, Appli Sequence 1, Appli Sequence 1, Appli Sequence 2268, Ap Sequence 8, Appli Sequence 8, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 7, Appli	3 7 7 7 7 8 8 8 8 8 8 7 7	2444688466684444	1111891117779	Sequence 2, Appli Sequence 4, Appli Sequence 4, Appli Sequence 1, Appli Sequence 1, Appli Sequence 11, Appli Sequence 19, Appli Sequence 19, Appli Sequence 19, Appli Sequence 19, Appli Sequence 16, Appli Sequence 46, Appli Sequence 24, Appli Sequence 24, Appli Sequence 24, Appli Sequence 24, Appli Sequence 24, Appli Sequence 1, Appli
US-08-484-106-7 US-09-320-095-9 US-09-310-543-9 Sequence 9, US-08-510-543-9 Sequence 9, US-09-413-795-2 US-09-443-795-2 US-09-111-730-6 US-09-111-730-6 US-09-134-001C-2268 US-09-627-650B-8 US-09-436-663C-8 US-09-446-663C-8 US-09-446-663C-8 US-09-446-663C-8 US-09-446-663C-8 US-09-446-663C-8 US-0	25.8287-23 US-08-436-771-8 US-08-436-771-8 US-08-436-771-8 US-08-436-798-8 US-08-437-998-8 US-08-487-797-8 US-08-562-8 US-08-562-8 US-08-569-49-3 US-08-569-49-3 US-09-436-063C-10 US-09-436-063C-10 US-09-436-063C-10 US-09-436-063C-10 US-09-436-063C-10 US-09-436-063C-10 US-09-436-063C-10	US-09-370-838-19 Sequence 119 US-08-143-219-1 Sequence 119 US-08-696-944-1 Sequence 119 US-09-667-135-1 Sequence 119 US-09-667-135-1 Sequence 119 US-09-620-312D-572 Sequence 219 US-09-511-577-7 Sequence 7 US-09-511-577-7 Sequence 7 US-09-511-577-7 Sequence 7 US-09-511-577-7 Sequence 7 US-09-511-577-7 Sequence 119 US-09-040-220D-1 Sequence 119 US-08-255-686-1 Sequence 119 US-08-255-686-1 Sequence 119 US-08-852-091-11 Sequence 119 US-08-954-954-955-955-955-955-955-955-955-955	US-08-820-754-11 Sequence 11 US-08-956-652-11 Sequence 11 US-08-956-652-11 Sequence 11 US-08-948-547-11 Sequence 11 US-09-2288-461-82 Sequence 21 US-09-956-653A-11 Sequence 21 US-09-619-353-1 Sequence 11 US-09-619-353-1 Sequence 11 US-08-619-353-1 Sequence 11 US-08-619-353-1 Sequence 11 US-08-619-353-1 Sequence 17 US-08-923-306A-7 Sequence 17 US-08-968-563-6 Sequence 7 US-08-968-563-6 Sequence 6	US-09-539-33D-206 US-09-539-33D-206 US-09-203-453-4 US-08-900-236-4 US-08-716-449-1 US-08-716-449-1 US-08-716-449-1 US-08-716-443-1 US-08-716-443-1 US-08-627-254C-29 US-08-627-254C-29 US-08-627-254C-29 US-08-930-589A-19 US-08-930-589A-19 US-09-232-200-46 US-09-689-423-1 US-08-689-423-1 US-09-192-702-1
404 1 US-08-484-106-7 Sequence 7, 409 3 US-09-320-095-9 Sequence 9, 455 3 US-09-510-543-9 Sequence 9, 455 4 US-08-406-030A-4 Sequence 9, 455 4 US-08-406-030A-4 Sequence 2, 455 4 US-08-111-730-6 Sequence 2, 504 2 US-08-412-1 Sequence 1, 504 4 US-09-412-1 Sequence 1, 508 4 US-09-413-01 Sequence 2, 508 4 US-09-627-650B-4 Sequence 8, 544 4 US-09-436-063C-8 Sequence 9, 544 4 US-09-436-063C-8 Sequence 9, 544 4 US-09-436-063C-8	562 2 US-08-436-701-8 Sequence 4, 562 2 US-08-436-771-8 Sequence 8, 562 2 US-08-436-771-8 Sequence 8, 562 2 US-08-487-798-8 Sequence 8, 562 2 US-08-487-798-8 Sequence 8, 563 3 US-08-569-62-8 Sequence 9, 564 3 US-08-569-749-3 Sequence 10, 601 4 US-09-436-063C-10 Sequence 10, 601 5 PCT-US96-12860-3 Sequence 10, 601 5 PCT-US96-12860-3	624 4 US-09-370-838-19 Sequence 19 628 1 US-08-143-219-1 Sequence 19 628 1 US-08-644-1 Sequence 17 727 4 US-09-667-135-1 Sequence 17 728 4 US-09-620-312D-572 Sequence 52 728 1 US-09-620-312D-572 Sequence 52 728 1 US-09-749-522-4 Sequence 52 729 4 US-09-511-570 Sequence 77 729 4 US-09-511-507-7 Sequence 77 729 4 US-09-511-507-7 Sequence 77 729 4 US-09-640-220D-1 Sequence 97 825 4 US-09-66-1 Sequence 17 825 4 US-09-265-66-1 Sequence 17 825 4 US-09-265-66-1 Sequence 17 826 1 US-08-359-796-11 Sequence 11	869 2 US-08-820-754-11 Sequence 11 869 3 US-08-956-652-11 Sequence 11 869 3 US-08-956-869-11 Sequence 11 869 3 US-08-948-547-11 Sequence 11 869 3 US-09-288-461-82 Sequence 11 869 4 US-08-956-653-11 Sequence 87 869 5 ECT-US55-11 Sequence 11 877 4 US-09-619-253-1 Sequence 11 881 2 US-08-533-3064-7 Sequence 11 883 2 US-08-533-3064-7 Sequence 7 884 3 US-08-569-6334-7 Sequence 7 884 3 US-08-569-6334-6 Sequence 7 885 3 US-08-569-6334-6 Sequence 6	Sequence 2, Sequence 4, Sequence 4, Sequence 4, Sequence 11, Sequence 11, Sequence 11, Sequence 12, Sequence 12, Sequence 24, Sequence 24, Sequence 14, Sequence 17, Sequence
2404 1 US-08-484-106-7 Sequence 7, 3 US-09-320-095-9 Sequence 9, 3 US-09-320-095-9 Sequence 9, 3 US-09-510-543-9 Sequence 9, 3 US-09-510-543-9 Sequence 9, 3 US-08-406-030A-4 Sequence 4, 3 US-08-408-403-1 Sequence 2, 3 US-08-946-412-1 Sequence 1, 3 US-09-436-063C-8 Sequence 8, 3 US-09-436-063C-8 Sequence 8, 3 US-09-436-063C-8 Sequence 9, 3 US-09-436-063C-8 US-09-	2511 2 256 6 5258287-23 Partent No. 256 2 2 US-08-436-771-8 Sequence 8, 2562 2 US-08-436-771-8 Sequence 8, 2562 2 US-08-436-771-8 Sequence 8, 2562 2 US-08-487-797-8 Sequence 8, 2562 5 US-08-487-797-8 Sequence 8, 2562 5 US-08-569-8 Sequence 8, 2561 3 US-08-569-8 Sequence 9, 2561 3 US-08-569-749-3 Sequence 16, 2561 4 US-09-627-6508-10 Sequence 16, 2561 4 US-09-627-6508-10 Sequence 16, 2561 4 US-09-627-6508-10 Sequence 16, 2561 5 US-08-61-2860-3 Sequence 3, 2561 5 US-08-61-2860-3 US-0	2624 4 US-09-370-838-19 Sequence 15 2628 1 US-08-143-219-1 Sequence 17 2628 2 US-08-143-219-1 Sequence 17 2628 2 US-08-696-944-1 Sequence 17 2628 2 US-08-696-312D-218 Sequence 17 27 27 4 US-09-620-312D-218 Sequence 17 27 27 4 US-09-620-312D-218 Sequence 27 27 27 28 US-09-510-472-7 Sequence 27 27 28 US-09-511-477-7 Sequence 7 27 27 28 US-09-511-477-7 Sequence 7 27 28 US-09-640-220D-1 Sequence 17 27 28 US-09-640-220D-1 Sequence 17 28 28 28 28 2 US-09-25-686-1 Sequence 17 28 28 28 2 US-08-85-796-11 Sequence 11 28 28 28 28 2 US-08-85-796-11 Sequence 11 28 28 28 28 28 28 28 28 28 28 28 28 28	8 2869 2 US-08-820-754-11 Sequence 11. 8 2869 3 US-08-956-652-11 Sequence 11. 8 2869 3 US-08-956-869-11 Sequence 11. 8 2869 3 US-08-948-547-11 Sequence 11. 8 2869 3 US-09-288-461-82 Sequence 11. 8 2869 3 US-09-288-461-82 Sequence 11. 8 2869 4 US-09-364-970-9 Sequence 11. 8 2867 4 US-09-56-53A-11 Sequence 11. 8 2867 4 US-09-619-353-1 Sequence 11. 8 2883 2 US-08-513-306A-7 Sequence 17. 8 2883 2 US-08-513-306A-7 Sequence 7. 8 2863 3 US-08-533-306A-7 Sequence 7.	946 4 US-09-237-328-2 Sequence 2, 2023 4 US-09-239-453-4 Sequence 2, 2023 4 US-09-233-45-4 Sequence 2, 2023 4 US-09-203-453-4 Sequence 4, 2023 4 US-09-203-453-4 Sequence 4, 2023 4 US-09-200-236-4 Sequence 1, 258 2 US-08-799-464A-1 Sequence 1, 258 2 US-08-799-464A-1 Sequence 1, 258 2 US-08-271-11 Sequence 1, 258 2 US-08-271-12 Sequence 1, 258 2 US-08-271-13 Sequence 2, 238 7 3 US-08-299-781-19 Sequence 2, 202-299-781-19 Sequence 1, 258 2 US-08-232-200-46 Sequence 2, 2023-201-46 Sequence 2, 2023-201-46 Sequence 2, 2023-201-24 Sequence 2, 2023-201-24 Sequence 2, 2023-201-24 Sequence 1, 258 2 US-08-928-211 Sequence 1, 258 2 US-08-928-21 US-
8 0.8 2404 1 US-08-484-106-7 Sequence 7. 8 0.8 2409 3 US-09-320-095-9 Sequence 9. 8 0.8 2409 4 US-09-320-095-9 Sequence 9. 8 0.8 2455 3 US-09-4106-7 Sequence 9. 8 2455 3 US-09-410-795-2 Sequence 9. 8 2459 4 US-09-410-795-2 Sequence 2. 8 0.8 2469 3 US-09-411-730-6 Sequence 6. 8 0.8 2504 2 US-09-414-0112-1 Sequence 1. 8 2508 4 US-09-414-0112-268 Sequence 8. 8 0.8 2508 4 US-09-627-6508-4 Sequence 8. 8 0.8 2508 4 US-09-446-013-8 Sequence 8. 8 0.8 2544 4 US-09-446-053-8 Sequence 4. 8 0.8 2544 4 US-09-446-053-8 Sequence 4. 8 0.8 2544 4 US-09-446-063-8 Sequence 4. 8 0.8 2545 4 US-09-446-063-8 Sequence 4. 8 0.8	8 0.8 2562 2 US-08-436-771-8 Sequence 4, 98-8 8 0.8 2562 2 US-08-436-771-8 Sequence 8, 90.8 2562 2 US-08-436-771-8 Sequence 8, 90.8 2562 2 US-08-437-998-8 Sequence 8, 90.8 2562 5 PCT-US95-02058-8 Sequence 8, 90.8 2561 3 US-08-758-662-8 Sequence 9, 90.8 2601 3 US-08-559-749-3 Sequence 10, 90.8 2601 4 US-09-436-063C-10 Sequence 10, 90.8 2601 4 US-09-436-063C-10 Sequence 10, 90.8 2601 5 PCT-US96-12860-3 Sequence 3, 90.8 2601 5 PCT-US96-12860-3	8 0.8 2624 4 US-09-370-838-19 Sequence 10 0.8 2628 1 US-08-656-944-1 Sequence 11 0.8 2628 2 US-08-656-944-1 Sequence 11 0.8 2718 4 US-09-667-135-1 Sequence 11 0.8 2727 4 US-09-667-135-1 Sequence 11 0.8 2728 4 US-09-620-312D-218 Sequence 12 0.8 2781 3 US-09-620-312D-218 Sequence 12 0.8 2781 4 US-09-621-477-7 Sequence 5 0.8 2781 4 US-09-511-477-7 Sequence 7 0.8 2781 4 US-09-511-477-7 Sequence 7 0.8 2781 4 US-09-511-477-7 Sequence 17 0.8 2788 4 US-09-621-200-9 Sequence 17 0.8 2825 4 US-09-265-686-1 Sequence 17 0.8 2825 4 US-09-265-686-1 Sequence 11 0.8 2869 1 US-08-266-686-1 Sequence 11 0.8 2869 2 US-08-266-681 Sequence 11 0.8 2869 2 US-08-265-686-1 Sequence 11 0.9 2860 2 US-08-21-11 Sequence 11 0.9 2860 2 US-08-21-21 US-08-21-21 0.9 2860 2 US-08-21-21 0.9 28	8 0.8 2869 2 US-08-820-754-11 Sequence 11	8 3023 4 US-09-539-3330-206 Sequence 2, 2023 4 US-09-539-3330-206 Sequence 2, 2023 4 US-09-539-3330-206 Sequence 4, 2023 4 US-09-00-236-4 Sequence 4, 2023 4 US-09-00-236-4 Sequence 4, 2023 2 US-08-799-464A-1 Sequence 1, 2023-2023-2023-2023-2023-2023-2024 Sequence 1, 2023-2023-2023-2024 Sequence 1, 2023-2023-2024 Sequence 1, 2023-2024-4 Sequence 1, 2023-2024-4 Sequence 1, 2023-2024-4 Sequence 2, 2023-2024-4 Sequence 1, 2023-2024-4 Sequ

Sequence 4, Appli Sequence 6, Appli Sequence 11, Appli Sequence 11, Appli Sequence 11, Appli Sequence 275, App	34	14	32	30,	31,	9,	7,	15	46	37, 82,	84, 82,	84	0 m	100	מ מי	2 4 8 4		4 4 5 8	18	170		7,	78	78	.00	138	18(	23	1, 4, V Q	<u>ر</u> د	ກໍຕັ	356	15,	11,	30,	Sequence 70, Appl Sequence 79, Appl
US-08-776-944-4 US-08-522-623-6 US-08-522-623-11 PCT-US93-01256-6 PCT-US93-03256-11 US-09-338-907-275	-sn ns-	US-	ns-sn	us-	us-	us-	us-	US-	sn s	us-	us- us-	-Sn	185	SD	us-	US-	US-	us-	US-	SD:	US-	PCT US-	us-	US-	us-	-SD	-SU	us-	us-	us-	-SD	US-	PCT	us-	us-	us-
444444 688867 714888																																				
000000																																				
71 71 71 71 71	17 17 17	17	17	17	17	17	17	17	17	17	17	17	17	7 7 7	17	17	17	17	17	17	17	17	17	17	17	17	17	117	17	17	17	17	17	17	17	17
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	910 0 911 912	913 914 915	9 1 6 6 1 7	918 919	920 921		0 924 925	926	928	929 930	931 932	933		0 937 7.66	დ ტ : ტ ტ :	940 941	942 943	944 945	0 946	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9. 0. 9. 0. 9. 0.	951 952	953 953	955 955	950	ສ ຫ ທ ທ ທ ຫ		0 962		965	966 967	968 968	970	971	973	974 C 975
Sequence 57, Appli Sequence 7, Appli Sequence 85, Appli Sequence 89, Appli Sequence 87, Appli Sequence 87, Appli	83, 1, 7	7,77		11, 8, A	3, A	W W W W	1, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	207, A	183,	183, 3, Aj	3, 4	102,	<b>⊣</b>	-190	17, 4, A	30, Ap	4, E	m 4	, W. r.	74, 67 74, 61	2	ന വ	ĀΜ	17,	i di	seguence eguence	equence 6 equence 2	equence 104,	equence	equence 3, App	equence 3 equence 1	equence 2	equence 13, Ap	equence 7, App	equence 34, Ap	Sequence 36, Appl Sequence 13, Appl
US-09-387-286-57 US-09-078-294-7 Sequence 7, P US-08-652-877-85 US-08-652-877-89 US-08-652-877-89 US-08-652-877-89 Sequence 89, US-08-476-515A-83	US-08-652-877-83 Sequence 83, US-08-520-373D-4 Sequence 4, P US-08-157-005-1 Sequence 1, P	US-08-747-863-1 Sequence 1, P US-09-565-864-1 Sequence 1, P US-09-470-661a-1 Sequence 1, P	US-09-146-053-7 Sequence 7, P US-08-943-731-4 Sequence 4, P	US-09-318-448-11 Sequence 11, A US-09-962-665-8 Sequence 8, Ap	US-09-820-005-3 Sequence 3, A US-08-370-975B-6 Sequence 6, A	US-09-820-002-3 Sequence 3, P US-09-740-027-3 Sequence 3, P	US-08-370-975B-1 Sequence 1, Al US-08-884-324-14 Sequence 14, A	US-08-781-891-207 Sequence 207, 115-09-781-66-207	US-09-338-907-183 Sequence 183,	US-09-218-207-183 Sequence 183, US-09-734-673-3 Sequence 3, A	US-09-820-924-3 Sequence 3, Ap US-09-780-049-18 Sequence 18, A	US-08-742-185-102 Sequence 102,	US-108-846-IIID-IS Sequence IS, A	US-08-742-185-101 Sequence 101, US-09-146-053-6 Sequence 6, A	US-08-920-422-17 Sequence 17, US-09-146-053-4 Sequence 4, A	US-09-733-294A-30 Sequence 30, A US-09-813-817-3 Sequence 3, Ap	US-09-978-197-3 Sequence 3, A US-09-873-404-3 Sequence 3, A	US-09-784-316-3 Sequence 3, Ap US-09-078-294-4 Sequence 4, Ap	US-09-078-294-3 Sequence 3, A	US-08-781-891-79 Sequence 79, US-08-781-891-79	US-09-618-166-79 Sequence 79, A US-09-791-211-3 Sequence 3, Ap	US-09-245-041-5 Sequence 5 US-09-801-876B-3 Sequence 3	US-09-128-155-16 Sequence 16, US-09-804-471A-3 Sequence 3, A	US-09-128-155-17 Sequence 17,	Sequence 1, A	4 US-09-643-990A-1 Sequence 1, A US-09-475-947A-12 Sequence 12, A	US-09-164-249B-6 Sequence 6, Ap US-08-629-001A-25 Sequence 25, A	US-08-642-274D-104 Sequence 104,	US-09-368-991-1 Sequence 1 US-09-456-038-1 Sequence 1	US-09-659-442-3 Sequence 3, App	US-08-415-593-31 Sequence 31, Ap. US-09-659-442-1 Sequence 1, App	US-09-659-442-2 Seguence 2, App	US-08-688-514-13 Sequence 13, Ap	US-09-306-290-7 Sequence 7, App US-09-306-290-14 Sequence 14, App	US-09-306-290-34 Sequence 34, Ap	US-09-306-290-36 Sequence 3 US-09-284-627-13 Sequence 1
US-09-387-286-57 Sequence 57, 8 US-09-078-294-7 Sequence 7, 8 US-08-652-877-85 Sequence 85, 9 US-08-652-877-89 Sequence 89, 9 US-08-652-877-87 Sequence 89, 9 US-08-652-877-87 Sequence 89, 9 US-08-476-515A-83 Sequence 83,	8 14086 3 US-08-652-877-83 Sequence 83, 8 14581 4 US-08-520-373D-4 Sequence 4, P 8 15108 1 US-08-157-005-1 Sequence 1, P	8 15108 3 US-08-747-863-1 Sequence 1, P 8 15108 4 US-99-565-864-1 Sequence 1, P 8 15440 4 118-09-470-46111-1 Sequence 1, P	8 17606 3 US-08-943-731-4 Sequence 4, 7	8 18596 3 US-09-318-448-11 Sequence 11, A 8 18597 4 US-09-962-665-8 Sequence 8, Ap	8 18853 4 US-09-820-005-3 Sequence 3, A B 20303 1 US-08-370-975B-6 Sequence 6, A	8 21784 4 US-09-820-002-3 Seguence 3, P 8 24707 4 US-09-740-027-3 Seguence 3, P	8 26764 1 US-08-370-975B-1 Sequence 1, A) 8 28994 3 US-08-884-324-14 Sequence 14, 3	8 29604 3 US-08-781-891-207 Sequence 207, 29604 4 US-08-166-207	8 37950 3 US-09-338-907-183 Sequence 183,	.8 37950 4 US-09-218-207-183 Sequence 183, .8 38564 4 US-09-734-673-3 Sequence 3, A	8 39982 4 US-09-820-924-3 Sequence 3, Ap. 8 40000 4 US-09-780-049-18 Sequence 18, A.	8 40328 3 US-08-742-185-102 Sequence 102,	8 40352 3 05-08-846-1110-15 Sequence 15, A 8 40352 4 US-09-443-077-15 Sequence 15, A	8 43/95 3 US-08-/42-185-101 Sequence 101, 8 45546 4 US-09-146-053-6 Sequence 6, A	8 48974 3 US-08-920-422-17 Sequence 17, 8 50000 4 US-09-146-053-4 Sequence 4, A	.8 51552 4 US-09-733-294A-30 Sequence 30, A .8 59065 4 US-09-813-817-3 Sequence 3, Ap	.8 59065 4 US-09-978-197-3 Sequence 3, A .8 63588 4 US-09-873-404-3 Sequence 3, A	.8 65042 4 US-09-784-316-3 Sequence 3, Ap8 80246 3 US-09-078-294-4 Sequence 4, Ap	8 80595 3 US-09-078-294-3 Sequence 3, A	.8 87350 3 US-08-781-891-79 Sequence 1, A	.8 87350 4 US-09-618-166-79 Sequence 79, A .8 87543 4 US-09-791-211-3 Sequence 3, Ap	.8 90050 3 US-09-245-041-5 Sequence 5 .8 148567 4 US-09-801-876B-3 Sequence 3	.8 152331 3 US-09-128-155-16 Sequence 16, .8 174493 4 US-09-804-471A-3 Sequence 3, A	8 176373 3 US-09-128-155-17 Seguence 17, 8 1664976 4 HS-08-916-421R-1	8 1830121 4 US-09-557-884-1 Sequence 1, A	.8 1830121 4 US-09-643-990A-1 Sequence 1, A .8 19 4 US-09-475-947A-12 Sequence 12, A	.8 24 4 US-09-164-249B-6 Sequence 6, Ap .8 30 2 US-08-629-001A-25 Sequence 25, A	8 30 3 US-08-642-2740-104 Sequence 104,	.8 32 4 US-09-368-991-1 Sequence 1 .8 32 4 US-09-456-038-1 Sequence 1	.8 34 4 US-09-659-442-3 Sequence 3, App	.8 35 2 US-08-415-593-31 Sequence 31, A <u>p</u> .8 37 4 US-09-659-442-1 Sequence 1, App	.8 37 4 US-09-659-442-2 Sequence 2, App	.8 40 3 US-08-688-514-13 Sequence 13, Apr	.8 40 3 US-09-306-290-7 Sequence 7, App8 40 3 US-09-306-290-14 Sequence 14. App.	.8 40 3 US-09-306-290-34 Sequence 34, Ap	.8 40 3 US-09-306-290-36 Sequence 3 .8 40 4 US-09-284-627-13 Sequence 1
8 11789 4 US-09-387-286-57 Sequence 57, 8 11811 3 US-09-078-294-7 Sequence 7, 8 14042 3 US-08-652-877-85 Sequence 85, 8 14044 3 US-08-652-877-89 Sequence 89, 8 14083 3 US-08-652-877-87 Sequence 87, 8 14083 3 US-08-476-515A-83 Sequence 83,	0.8 14086 3 US-08-652-877-83 Sequence 83, 0.8 14581 4 US-08-520-373D-4 Sequence 4, P 0.8 15108 1 US-08-157-005-1 Sequence 1, P	0.8 15108 3 US-08-747-863-1 Sequence 1, P 0.8 15108 4 US-09-565-864-1 Sequence 1, P 0.8 15450 4 11S-00-470-56112-1 Sequence 1, P	0.8 17606 3 US-08-943-731-4 Sequence 4, P	0.8 18596 3 US-09-318-448-11 Seguence 11, A 0.8 18597 4 US-09-962-665-8 Seguence 8, Ap	0.8 18853 4 US-09-820-005-3 Sequence 3, A 0.8 20303 1 US-08-370-975B-6 Sequence 6, A	0.8 21784 4 US-09-820-002-3 Sequence 3, P 0.8 24707 4 US-09-740-027-3 Sequence 3, P	0.8 26764 1 US-08-370-975B-1 Sequence 1, A) 0.8 28994 3 US-08-884-324-14 Sequence 14, 3	0.8 29604 3 US-08-781-891-207 Sequence 207, 0.8 29604 4 IIS-08-781-891-207 Sequence 207, 0.9 29604 4 IIS-09-618-166-207	0.8 37950 3 US-09-338-907-183 Sequence 183,	0.8 37950 4 US-09-218-207-183 Sequence 183, 0.8 38564 4 US-09-734-673-3 Sequence 3, A	0.8 39982 4 US-09-820-924-3 Sequence 3, Ap 0.8 40000 4 US-09-780-049-18 Sequence 18, A	0.8 40328 3 US-08-742-185-102 Sequence 102,	0.8 40352 3 US-08-080-1110-15 Sequence 15, A	0.8 43/95 3 US-08-742-185-101 Sequence 101,	0.8 48974 3 US-08-920-422-17 Sequence 17, 0.8 50000 4 US-09-146-053-4 Sequence 4, A	0.8 51552 4 US-09-733-294A-30 Sequence 30, A 0.8 59065 4 US-09-813-817-3 Sequence 3, Ap	0.8 59065 4 US-09-978-197-3 Sequence 3, A 0.8 63588 4 US-09-873-404-3 Sequence 3, A	0.8 65042 4 US-09-784-316-3 Sequence 3, Ap 0.8 80246 3 US-09-078-294-4 Sequence 4, Ap	0.8 80595 3 US-09-078-294-3 Sequence 3, A	0.8 87350 3 US-08-730-300-1 Sequence 1, A	0.8 87350 4 US-09-618-166-79 Sequence 79, A 0.8 87543 4 US-09-791-211-3 Sequence 3, Ap	0.8 90050 3 US-09-245-041-5 Sequence 5 0.8 148567 4 US-09-801-876B-3 Sequence 3	0.8 152331 3 US-09-128-155-16 Sequence 16, 0.8 174493 4 US-09-804-471A-3 Sequence 3. A	0.8 176373 3 US-09-128-155-17 Sequence 17,	0.8 1830121 4 US-09-557-884-1 Sequence 1, A	0.8 1830121 4 US-09-643-990A-1 Sequence 1., A 0.8 19 4 US-09-475-947A-12 Sequence 12, A	0.8 24 4 US-09-164-249B-6 Sequence 6, Ap 0.8 30 2 US-08-629-001A-25 Sequence 25, A	0.8 30 3 US-08-642-274D-104 Sequence 104,	0.8 32 3 US-09-368-991-1 Sequence 1 0.8 32 4 US-09-456-038-1 Sequence 1	0.8 34 4 US-09-659-442-3 Sequence 3, App	0.8 35 2 US-08-415-593-31 Sequence 31, Ap. 0.8 37 4 US-09-659-442-1 Sequence 1, App	0.8 37 4 US-09-659-442-2 Seguence 2, App	0.8 40 3 US-08-514-13 Sequence 13, Apr	0.8 40 3 US-09-306-290-7 Sequence 7, App 0.8 40 3 US-09-306-290-14 Sequence 14, Ap	0.8 40 3 US-09-306-290-34 Sequence 34, Ap	. 0.8 40 3 US-09-306-290-36 Sequence 3 0.8 40 4 US-09-284-627-13 Sequence 1

us-09-667-170a-440.oligo.rni

```
Sequence 2
Sequence 1
Sequence 2
                                                                                                                                                                                                                                                                                              Sequence 1
Sequence 1
Sequence 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3
Sequence 1
Sequence 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1
Sequence 1
                                            Sequence
Sequence
Sequence
                                                                                                                                                      Sequence
                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/08861549
Patent No. 5874346
GENERAL INFORMATION:
APPLICANT: Bandman, Olga
APPLICANT: Coli, Surya K.
APPLICANT: Zhang, Hong
TITLE OF INVENTION: NEW TRANSCRIPTION REPRESSOR
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.,
ZIP. 94304

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: BM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/861,549
FILING DATE: Filed Herewith
APPLICATION NUMBER:
FILING DATE: ATPORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REPERBNCE/DOCKET NUMBER: 36,749
US-09-736-457-1208
US-09-619-542B-27
US-08-619-542B-27
US-08-623-906A-3
US-08-616-38A-17
US-09-08-16-38A-17
US-09-08-17-38A-17
US-08-08-17-38A-17
US-08-08-17-382-17
US-08-17-385-25
US-08-361-441B-25
US-09-495-050A-281
US-09-495-050A-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-248-016-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Incyte Pharmaceuticals, Inc 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHRACTERISTICS:
LENGTH: 737 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: SYNORABO1
CLONE: 1620089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
US-08-861-549-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                  Sequence 252, Application US/09016434

Sequence 252, Application US/09016434

Patent No. 6500938

GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Sellhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                           1.2%; Score 27; DB 2; Length 737;
100.0%; Pred. No. 0.053;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.2%; Score 27; DB 4; Length 738; 100.0%; Pred. No. 0.053; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
SOFTWARE: WORD PATA:
APPLICATION NUMBER: US/09/016,434
FILING DATE:
PRIOR APPLICATION
SPELICATION NUMBER: PALONO
STANSIFICATION NUMBER: AP-0002 US
TELEPHONE: Celler, Karen J.
REFERENCE/DOCKET NUMBER: PA-0002 US
TELEPHONE: GEO) 845-4166
INFORMATION FOR SEQ ID NO: 252:
SEQUENCE CHARACTERISTICS:
LENGTH: 738 base pairs
TYPE: mucleic acid
STRANDDNESS: single
                                                                                                                                   2191 GAGGAGAGGTAGAGCTGTTCTTAA 2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2191 GAGGAGAAGGTAGAGCTGTTCTTAA 2217
                                                                                                                                                                              711 GAGGAGGAAGGTAGAGCTGTTCTTAA 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      712 daggagagaaggradaggcrgrrcrraa 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13, Application US/09920759
Patent No. 6537811
GENERAL INFORMATION:
                                      Query Match
Best Local Similarity 100.0
Matches 27; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.0
Matches 27, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear

| MMBDIATE SOURCE:

| LIBRARY: BRAITUT13

| CLONE: 1620089

US-09-016-434-252
                                                                                                                                                                                                                                               RESULT 2
US-09-016-434-252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
US-09-920-759-13
US-08-861-549-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    СP
```

```
LOCATION: 710

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 711

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 712

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 713

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 714

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 715

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 716

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 717

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 719

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 720

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 721

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 722

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 722

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 723

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 723

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 725

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 725

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 725

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 726

OTHER INFORMATION: UNKNOWN

NAME/KEY: UNSUZE

LOCATION: 1730

OTHER INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INCOMMENTANT UNKNOWN
NAME/KEY: unsure
LOCATION: 731
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 732
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 733
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 733
APPLICANT: Brenda F. Baker
APPLICANT: Susan M. Freier
TITLE OP INVENTION: ANTISENSE MODULATION OF SAP-1 EXPRESSION
FILE REFERENCE: RTS-0267
CURRENT APPLICATION NUMBER: US/09/920,759
CURRENT FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 91
EROPINE 115788
                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: unsure
LOCATION: 690
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 692
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 693
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 694
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 695
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 695
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 696
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 696
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 697
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 699
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 699
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 699
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 700
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 701
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 702
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 703
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: unknown NAME/KEY: unsure LOCATION: 703
OTHER INFORMATION: unknown NAME/KEY: unsure LOCATION: 704
OTHER INFORMATION: unknown NAME/KEY: unsure LOCATION: 705
OTHER INFORMATION: unknown NAME/KEY: unsure LOCATION: 706
OCHER INFORMATION: unknown NAME/KEY: unsure LOCATION: 706
OCATION: 706
OTHER INFORMATION: unknown NAME/KEY: unsure LOCATION: 706
OTHER INFORMATION: unknown NAME/KEY: unsure LOCATION: 707
OTHER INFORMATION: unknown NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 708
OTHER INFORMATION: unknown NAME/KEY: unsure
LOCATION: 709
OTHER INFORMATION: unknown NAME/KEY: unsure
```

us-09-667-170a-440.oligo.rni

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õĘ
                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 deletion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       O
                                                                                                                  ch 1.1%; Score 24; DB 4; Length 40000; 18 Similarity 100.0%; Pred. No. 0.66; 24; Conservative 0; Mismatches 0; Indels 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 deletion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 99117
OTHER INFORMATION: 5-130-276 : polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polymorphic
                                                                                                                                                                                            15461 CCAGCCTGGGTGACAGTGAGACTC 15438
                                                                                                                                                                           27 CCAGCCTGGGTGACAGTGAGACTC 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 90842
OTHER INFORMATION: 99-1437-325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99-1442-224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5-129-144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5-124-273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5-130-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5-127-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KBY: allele
LOCATION: 93714
OTHER INFORMATION: 5-128-60
                                            TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                   Query Match
Best Local Similarity
Matches 24; Conserva
   NUMBER OF SEQ ID NOS:
SEQ ID NO 18
LENGTH: 40000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: allele
LOCATION: 97152
OTHER INFORMATION: 5
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: allele
LOCATION: 72794
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 88073
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 99098
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 97122
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: allele
                                                                                                                                                                                                                                                RESULT 5
US-09-345-882-1/c
                                                                          ; FEATURE:
US-09-780-049-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                             ò
                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
US-09-780-049-18/C
US-09-780-049-18/C
Sequence 18, Application US/09780049
Patent No. 6465260
GENERAL INFORMATION:
APPLICANT: Brett P. Monia
APPLICANT: Jacqueline Wyatt
TITLE OF INVENTION: ANTISENSE MODULATION OF PROTEIN PHOSPHATASE 2 CATALYTIC SUBUNIT
TITLE OF INVENTION: EXPRESSION
FILE REPERENCE: RTS-0134
CURRENT APPLICATION NUMBER: US/09/780,049
CURRENT FILING DATE: 2001-02-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
1.1%; Score 24; DB 4; Length 15788;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 24; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9784 CCAGCCTGGGTGACAGTGAGACTC 9807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27 CCAGCCTGGGTGACAGTGAGACTC 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 746
OTHER INFORMATION: unknown
NAME/KEY: unsure
LOCATION: 747
OTHER INFORMATION: unknown
                                                                                                                                                                                                                                             LOCATION: 740
OTHER INFORMATION: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: unsure
LOCATION: 745
OTHER INFORMATION: unknown
                                                                                                                                                         LOCATION: 738
OTHER INFORMATION: unknown
NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                          unknown
                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: unknown
                         LOCATION: 735
OTHER INFORMATION: u
NAME/KEY: unsure
LOCATION: 736
OTHER INFORMATION: u
                                                                                                                                                                                                    LOCATION: 739
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 748
OTHER INFORMATION:
NAME/KEY: unsure
                                                                                                                                                                                                                                                                                      LOCATION: 741
OTHER INFORMATION:
NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                  LOCATION: 742
OTHER INFORMATION:
NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 743
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                LOCATION: 737
OTHER INFORMATION:
NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 744
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                         unsure
742
                                                                                                                                                                                                                                                                             unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: unsure
LOCATION: 750
                                                                                                                                                                                                                                    unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: unsure
                                                                                                    NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COCATION:
```

ò

```
FEATURE:
NAME/KEY: allele
LOCATION: 97099..97145
OTHER INFORMATION: polymorphic fragment 99-1442-224 SEQ ID50
                                                                                                                                                                                                                                                 COCHIEN INFORMATION: 97099. 97145
OTHER INFORMATION: Polymorphic fragment 99-1442-224 SEQ ID71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: allele
LOCATION: 106918..106966
OTHER INFORMATION: polymorphic fragment 5-133-375 SEQ ID37
                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: allele
LOCATION: 97130..97177
OTHER_INFORMATION: polymorphic fragment 5-129-144 SEQ ID33
                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: allele
LOCATION: 97130..97177
OTHER INFORMATION: polymorphic fragment 5-129-144 SEQ ID54
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: allele
LOCATION: 99075..99121
OTHER INFORMATION: polymorphic fragment 5-130-257 SEQ ID34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: allele
LOCATION: 99075..99121
OTHER INFORMATION: polymorphic fragment 5-130-257 SEQ ID55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: allele
COCATION: 99094..99140
OTHER INFORMATION: polymorphic fragment 5-130-276 SEQ ID35
PEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: allele
LOCATION: 99094..99140
OTHER INFORMATION: polymorphic fragment 5-130-276 SEQ ID56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: allele
LOCATION: 106918..106966
OTHER INFORMATION: polymorphic fragment 5-133-375 SEQ ID58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: allele
LOCATION: 108084..108130
OTHER INFORMATION: polymorphic fragment 5-135-155 SEQ ID38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: allele
LOCATION: 108127..108177
OTHER INPORMATION: polymorphic fragment 5-135-198 SEQ ID39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: allele
LOCATION: 108127..108177
OTHER INFORMATION: polymorphic fragment 5-135-198 SEQ ID60
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 103783..103828
OTHER INFORMATION: polymorphic fragment 5-131-395 SEQ ID36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 108084..108130
OTHER INFORMATION: polymorphic fragment 5-135-155 SEQ ID59
   FEATURE:
NAMB/KEY: allele
LOCATION: 93690..93736
OTHER INFORMATION: polymorphic fragment 5-128-60 SEQ ID32
                                                                           FEATURE:
NAME/KEY: allele
LOCATION: 93690..93736
OTHER INFORMATION: polymorphic fragment 5-128-60 SEQ ID53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME, KEY: allele
LOCATION: 103783..103828
OTHER INFORMATION: polymorphic fragment 5-131-395 SEQ
                                                                                                                                                                                                                    FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEX: allele
LOCATION: 90819..90865
OTHER INFORMATION: complement polymorphic fragment 99-1437-325 SEQ ID49
                                                                                                                                                                                                                    GTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: allele
LOCATION: 90819..90865
OTHER INFORMATION: complement polymorphic fragment 99-1437-325 SEQ ID70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G
                                                                           ø
                                                                                                                                                 æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                    of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             οĘ
                                                                           θĘ
                                                                                                                                                οĘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ō
                                                                                                                                                                                                                    insertion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             insertion
                                                                           insertion
                                                                                                                                                insertion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           insertion
                                                                                                                                                                                                                                                                                          Ö
                                                                                                                                                                                                                                                                                                                                                              E
                                                                                                                                                                                                                                                                                                                                                                                                                                     Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DALOAR.
NAME/KEY: allele
LOCATION: 72771..72817
OTHER INFORMATION: polymorphic fragment 5-124-273 SEQ ID51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OCATION: 72771..72817
THER INFORMATION: polymorphic fragment 5-124-273 SEQ ID30
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: allele
LOCATION: 88050..88056
OTHER INFORMATION: polymorphic fragment 5-127-261 SEQ IDS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID31
         ör
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                            or
                                                                                                                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                                                                        占
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
         Æ
                                                                                                                                                                                                                                                                                            ø
                                                                                                                                                                                                                                                                                                                                                                                                                                     υ
                                                                                                                                                                                                                                                                                                                                                              U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ø,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : polymorphic base
                                                                                                                                                base
                                                                                                                                                                                                                  : polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             base
OTHER INFORMATION: 5-131-395 : polymorphic base
                                                                           base
                                                                                                                                                                                                                                                                                                                                                              base
                                                                                                                                                                                                                                                                                                                                                                                                                                     base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: allele
LOCATION: 88050..88096
OTHER INFORMATION: polymorphic fragment 5-127-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  base
                                                                                                                                              polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                     : polymorphic
                                                                         : polymorphic
                                                                                                                                                                                                                                                                                        : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : polymorphic
                                                                                                                                                                                                                                                                                                                                                              : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WAME/KEY: allele
LOCATION: 150329
OTHER INFORMATION: 5-145-24 : polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polymorphic
                                                                                                                                                                                                                                                                                                                                                                                            VAME/KEY: allele
LOCATION: 134134
OTHER INFORMATION: 5-140-120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OCATION: 134362
THER INFORMATION: 5-140-348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATURE:
AME/KEY: allele
ACCATION: 134374

THER INFORMATION: 5-140-361
                                 NAME/KEY: allele
LOCATION: 106940
OTHER INFORMATION: 5-133-375
                                                                                                                           LOCATION: 108106
OTHER INFORMATION: 5-135-155
                                                                                                                                                                                                 LOCATION: 108149
OTHER INFORMATION: 5-135-198
                                                                                                                                                                                                                                                                      LOCATION: 108308
OTHER INFORMATION: 5-135-357
                                                                                                                                                                                                                                                                                                                      NAME/KEY: allele
LOCATION: 108471
OTHER INFORMATION: 5-136-174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OCATION: 146345
OTHER INFORMATION: 5-143-101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: allele
CCCATION: 160031
OTHER INFORMATION: 5-148-352
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THER INFORMATION: 5-143-84
                                                                                                                                                                                                                        FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WAME/KEY: allele
                                                                                                                                                                               NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AME/KEY: allele
OCATION: 146328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                  EATURE:
```

```
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         James W.
Jeffery W.
MATERIALS AND METHODS FOR
IDENTIFYING AND ANALYZING INTERMEDIATE TANDEM
REPEAT DNA MARKERS
                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
Query Match
1.1%; Score 24; DB 4; Length 162450;
Best Local Similarity 100.0%; Pred. No. 0.58;
Matches 24; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 3; Length 72928;
1.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READBLE FORM:
MEDIUM TYPE: Disketre
COMPUTER: IBM Compatible
OFBEATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/009,913
FILING DATE: 21-JAN-1998
CLASSIFICATION:
APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                               Sequence 1, Application US/09009913
; Patent No. 6087485
; GENERAL INFORMATION:
; APPLICANT: AxyS Pharmaceuticals, Inc.
; TITLE OF INVENTION: Asthma Related Genes
; NUMBER OF SEQUENCES: 339
; CORRESPONDENCE ADDRESSS:
; ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Ave, Suite 200
; CITT: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 1.0%; Score 23; DB Best Local Similarity 100.0%; Pred. No. 1.6 Matches 23; Conservative 0; Mismatches
                                                                                                                 54003 CCAGCCTGGCTGACAGGACTC 53980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         47805 GAGGITGAAGIGAGCAGAGAICA 47783
                                                                                  27 CCAGCCTGGGTGACAGTGAGACTC 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-018-584A-27; Sequence 27, Application US/09018584A; Patent No. 6238863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Sherwood, Pamela J
REGISTRATION NUMBER: 36,677
REFERENCE/DOCKET NUMBER: SEC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 72228 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: Genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 650-327-3231
TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bacher, J
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schumm,
Bacher,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Schumm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94301
                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                          US-09-009-913-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-009-913-1
                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: F
```

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-623-906A-17
Sequence 17, Application US/08623906A
SETTLE OF INVENTION: Microsatellite Sequences for Canine TITLE OF INVENTION: Microsatellite Sequences for Canine TITLE OF INVENTION: Genotyping NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
STREET: Abbarcadero Center, Suite 3400
CITY: San Francisco
STREET: CAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.0%; Score 22; DB 3; Length 333; 100.0%; Pred. No. 6.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/623,906A
                                                             100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: US
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71 AAAAAAGAAAGAAAGAAAAGA 92
NUMBER OF SEQUENCES: 147
CORRESPONDENCE ADDRESS: ADDRESS: Promega Corporation
STREET: 2800 Woods Hollow Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : plasmid, pGem3Zf(+)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POSITION IN GENOME:
CHROMOSOME/SEGMENT: 15q26.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: Circular
MOLECULE TYPE: Genomic DNA
HYPOTHETICAL: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 333 bp
TYPE: Nucleic Acid
STRANDEDNESS: Double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMMEDIATE SOURCE:
LIBRARY: plasm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-018-584A-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
```

```
APPLICANT: Huber, Brian
APPLICANT: Richards, Cynthia
APPLICANT: Richards, Cynthia
AITLE OF INVENTION: Molecular Constructs Comprising a Carcinoembryonic Antigen (CI TITLE OF INVENTION: Transcriptional Regulatory Region
FILE REFERENCE: PB1087US4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/08154712B
Patent No. 6337209
GANERAL INFORMATION:
GANERAL INFORMATION:
GANERAL INFORMATION:
APPLICANT: Huber, Brian
APPLICANT: Richards, Cynthia
TITLE OF INVENTION: Molecular Constructs Containing a Carcinoembryonic Antigen Regriff REFERENCE:
FILE REFERENCE:
CURRENT FALING DATE: 1998-11-19
NUMBER OF SEQ ID NOS: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Henderson, Daniel R.
APPLICANT: Yu, De Chao
ITILE OF INVENTION: TARGET CELL-SPECIFIC ADENOVIRAL VECTORS
ITILE OF INVENTION: CONTAINING E3 AND METHODS OF USE THEREOF
FILE REPERBRENCE: 348022001300
CURRENT APPLICATION NUMBER: US/09/474,699
CURRENT FILING DATE: 1999-12-29
PRIOR PLICATION NUMBER: 60/114,262
PRIOR FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FASESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 22; DB 4; Length 11288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.0%; Score 22; DB 4; Length 11288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 1.0%; Scor.
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 4.9
Mismatches
                                                                                                                                                                           FILE REFERENCE: PB1087US4
CURRENT APPLICATION NUMBER: US/08/481,968A
CURRENT FILING DATE: 1999-06-07
NUMBER OF SEQ ID NOS: 36
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          834 AAAAAAGAAAGAAAGAAAAAA 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         834 AAAAAGAAGAAAGAAAAAGA 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71 AAAAAGAAAGAAAGA 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71 AAAAAGAAAGAAAGA 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10, Application US/09474699 Patent No. 6495130
                   Sequence 4, Application US/08481968A
Patent No. 6300490
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 1.0
Best Local Similarity 100.
Matches 22; Conservative
                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                  LENGTH: 11288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-474-699-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-154-712B-4
US-08-481-968A-4
                                                                                                                                                                                                                                                                                                                                                                                     US-08-481-968A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
US-08-154-712B-4
                                                                                                                                                                                                                                                                                               SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Richards, Cynthia Ann
APPLICANT: Richards, Cynthia Ann
APPLICANT: Huber, Exian E.
TITLE OF INVENTION: Transcriptional Regulatory Sequence of Carcinoembryonic
Patent No. 6194211
FILLE OF INVENTION: Antigen for Expression Targeting
FILE REPERENCE: PB1508USW
CURRENT APPLICATION NUMBER: US/08/646,301A
CURRENT FILING DATE: 1996-05-16
NUMBER OF SEQ ID NOS: 25
SOFTWARE: Patent IN Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .<u>`</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.0%; Score 22; DB 3; Length 11288;
100.0%; Pred. No. 4.9;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 350;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 110...195
OTHER INFORMATION: /note= "Nucleotides 110-195 are
OTHER INFORMATION: repeat sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature
LOCATION: 196.7350
OTHER INFORMATION: /note= "Nucleotides 196-350 are
OTHER INFORMATION: unique flanking sequence"
                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc feature
LOCATION: 1..109
OTHER INFORMATION: /note= "Nucleotides 1-109 are
OTHER INFORMATION: unique flanking sequence"
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 1.0%; Score 22; DB 2; Best Local Similarity 100.0%; Pred. No. 6.5; Matches 22; Conservative 0; Mismatches
                                                                                                             A-62282/BIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 AAAAAGAAGAAAGAAAAGA 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71 AAAAAAGAAAGAAAAAAA 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71 AAAAAAGAAAGAAAGAAAAGA 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/08646301A Patent No. 6194211
         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sherwood, Pamela J.
REGISTRATION NUMBER: 36,677
REFERENCE/DOCKET NUMBER: A-62
TELECHNICATION INFORMATION:
TELEPHONE: 415-781-1989
TELEFAX: 415-781-1989
TELEFAX: 415-398-3249
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 350 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match
Best Local Similarity 100.0
Matches 22, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 1
LENGTH: 11288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-623-906A-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-646-301A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-646-301A-1
```

엄

ò

834 AAAAAGAAAGAAAGAAAAGA 855

g

ò

RESULT 10

TYPE: DNA

```
OTHER INFORMATION: n = A, T, C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: 5'UTR
LOCATION: (1)..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                 RESULT 15
US-09-922-445-1/c
                       ; UTHER INFURI
US-09-964-469-3
                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: GUEGLER, Karl et al
APPLICANT: GUEGLER, Karl et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
THE REPERENCE: C0000-06-01
PRIOR PILING DATE: 2000-06-01
PRIOR PILING DATE: 2000-16-01
PRIOR FILING DATE: 2000-12-18
THOR FILING DATE: 2000-12-18
SOFTWARE: PSELSEQ for Windows Version 4.0
SOFTWARE: PSELSEQ for Windows Version 4.0
TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: GUEGLER, Karl et al
APPLICANT: GUEGLER, Karl et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REPERENCE: CLOO0636
CURRENT APPLICATION NUMBER: US/09/738,894A
CURRENT PILLION DATE: 2000-12-18
NUMBER OF SEQ ID NOS: 4
SOUTHWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                           Query Match
1.0%; Score 22; DB 4; Length 15056;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 22; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
1.0%; Score 22; DB 4; Length 36651;
Best Local Similarity 100.0%; Pred. No. 4.4;
Matches 22; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                         4602 AAAAAGAAAGAAAAAAA 4623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5334 AAAAAGAAAGAAAGAAAAAGA 5355
                                                                                                                                                                                                                                                               71 AAAAAAGAAAGAAAAAAA 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71 AAAAAAGAAAGAAAAAAA 92
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/09738894A Patent No. 6331423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
LOCATION: (1)...(36651)
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09964469 Patent No. 6579709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature LOCATION: (1)...(36651)
                            LENGTH: 15056
TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 3
LENGTH: 36651
TYPE: DNA
ORGANISM: Human
                                                                                                           US-09-474-699-10
                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
US-09-738-894A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-738-894A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-964-469-3
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

```
COTHER INFORMATION:

NAME/KEY: misc_feature
LOCATION: (24801).

OCHER INFORMATION: uclectide 24801 is a single nuclectide polymorphism which can }

OTHER INFORMATION: A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOCATION: (27025)..(27178)

OTHER INFORMATION:

NAMES/KEY: Introm

LOCATION: (27179)..(30519)

OTHER INFORMATION:

NAMES/KEY: MASC feature

LOCATION: (27645)..(27645)

OTHER INFORMATION: nucleotide 27645 is a single nucleotide polymorphism which can }

OTHER INFORMATION: C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature_LOCATION: (24941).
LOCATEN INFORMATION: nucleotide 24941 is a single nucleotide polymorphism which can }
OTHER INFORMATION: ror c
OTHER INFORMATION: ror c
                                                       ò
                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Andersson, Maria K.
APPLICANT: Berglund, Lars G. T.
APPLICANT: Reneland, Rikard H.
APPLICANT: Reneland, Rikard H.
TPLICANT: Adam, Gail I. R.
TITLE OF INVENTION: REAGENTS AND METHODS FOR DETECTION OF HEART FAILURE FILE REFERENCE: GG12-605
                                                    Gaps
                                                    0
     DB 4; Length 36651;
4.4;
                                                    0; Indels
Query Match
1.0%; Score 22; DB
Best Local Similarity 100.0%; Pred. No. 4.4
Matches 22; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/922,445
CURRENT FILING DATE: 2001-08-03
NUMBER OF SEQ ID NOS: 51
SEQ TWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH:.38653
                                                                                                                                               5334 AAAAAGAAAGAAAGAAAAGA 5355
                                                                                                  92
                                                                                                                                                                                                                                                                ; Sequence 1, Application US/09922445; Patent No. 6528268
                                                                                             71 AAAAAAGAAAGAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: exon
LOCATION: (26402)..(26543)
OTHER INFORMATION:
LOCATION: (26544)..(27024)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: exon
LOCATION: (30520)..(30681)
OTHER INFORMATION:
NAME/KEY: Intron
LOCATION: (30682)..(30894)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: Intron
LOCATION: (26253)..(26401)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: exon
LOCATION: (30895)..(31027)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: exon
LOCATION: (26157)..(26252)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1)..(26156)
```

```
NAME/KEY: Intron
COMPRON. (13747)

OTHER INFORMATION:
COMPRON. (1309). (31747)

OTHER INFORMATION:
COMPRON. (131642). (31841)

OTHER INFORMATION:
COMPRON. (131642). (31969)

OTHER INFORMATION:
COMPRON. (13263). (31444)

OTHER INFORMATION:
COMPRON. (132649). (31444)

OTHER INFORMATION:
COMPRON. (13649). (31653)

OTHER INFORMATION:
COMPRON. (13649). (31653)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 1.0%; Score 22; DB 4; Length 38653; Best Local Similarity 100.0%; Pred. No. 4.4; Matches 22; Conservative 0; Mismatches 0; Indels 0
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-922-445-1
```

31288 AAAAAAGAAAGAAAGAAAAGA 31267 엄

71 AAAAAAGAAAGAAAAAAA 92

δ

ó,

Gaps ; 0

Search completed: October 30, 2003, 10:09:13 Job time : 145 secs

Sequence 746, App Sequence 23044, A Sequence 93467, A Sequence 9767, Ap Sequence 743, App Sequence 1307, Ap Sequence 1307, Ap Sequence 1307, Ap

Sequence ,

Sequence 288405, Sequence 126394, Sequence 126395, Sequence 261158,

Sequence 288404,

```
4 US-10-163-866-53

4 US-10-163-866-53

4 US-00-854-133-442

4 US-00-144-649A-442

4 US-10-144-649A-741

5 US-10-029-386-2344

5 US-10-029-386-2344

6 US-10-029-386-2344

7 US-10-029-632-2868

7 US-10-027-632-2863

7 US-10-027-632-286

7 US-10-027-632-286

7 US-10-027-632-286

7 US-10-027-632-286

7 US-10-027-632-286

7 US-10-027-632-286

7 US-10-027-632-388

7 US-10-027-632-388

7 US-10-027-632-388

7 US-10-027-632-388

7 US-10-027-632-388

7 US-10-027-632-3988

7 US-10-027-632-3988

7 US-00-764-891-9103

7 US-00-764-891-9103

7 US-00-764-891-9103

7 US-00-764-891-9103

7 US-00-764-891-9103

7 US-00-7632-3988

7 US-10-027-632-3988

7 US-10-027-632-3988

7 US-10-027-632-3988

7 US-10-027-632-3988

7 US-00-764-891-9103

7 US-00-764-891-9104

7 US-00-764-891-9103

8 US-10-027-632-3988

9 US-10-027-632-398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5958
6427
6427
10039
111124
31718
31718
31718
31718
42299
99014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1193
23579
136328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     611
20645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1223
2561
2561
2561
2561
17674
  102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
102020
10
  ; Search time 432 Seconds
(without alignments)
14096.332 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published Applications NA:*

1: /cgn2_6/ptodate/2/pubpna/PcrT PUBCOMB.seq:*
2: /cgn2_6/ptodate/2/pubpna/PcrT May PUB.seq:*
3: /cgn2_6/ptodate/2/pubpna/PcrT May PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/USO6_NEW PUB.seq:*
5: /cgn2_6/ptodata/2/pubpna/USO6_NEW PUB.seq:*
5: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
7: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
8: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO9_NEW PUB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO9_NEW PUB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO9_NEW PUB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO9_NEW PUB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3623182
                      GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-738-973-441

US-10-144-649A-741

US-110-164-649A-741

US-110-164-649A-741

US-110-163-866-31

US-110-133-013-40

US-110-133-013-40

US-110-133-013-40

US-110-163-866-33

US-110-163-866-34

US-110-163-866-34

US-110-163-866-34

US-110-163-866-34

US-110-163-866-34

US-110-163-866-34

US-110-163-866-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-738-973-440
US-09-854-133-440
US-10-144-649A-440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                   1811591 segs, 1359896290 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                   - nucleic search, using sw model
                                                                                                                                                                October 30, 2003, 07:34:18
                                                                                                                                                                                                                                                                                                                                                                                   Gapop_60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Listing first 1000
                                                                                                                                                                                                                                                           US-09-667-170A-440
2239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0040044440044446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22339
22339
22239
22239
33144
20411
20411
1561
1528
974
                                                                                                                                                                                                                                                                                                                                                          OLIGO_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.000.0
1000.0
1000.0
883.4
4.4
883.4
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.5
741.
                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22239
22239
22239
1867
1867
1867
1867
1722
1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1454
1420
1339
1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Word size :
                                                                                                                   OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                               Seguence:
                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.
```

Sequence 1993, App Sequence 2201, App Sequence 2201, App Sequence 201, App Sequence 108, App Sequence 106, App Sequence 29270, A Sequence 29271, A Sequence 29271, A Sequence 29272, A Sequence 29272, A Sequence 3984, Ap Sequence 3988, Ap Sequence 3988, Ap Sequence 3988, Ap Sequence 3988, Ap Sequence 2988, Ap Sequence 3988, Ap Sequence 2988, Ap Sequence 2988, Ap Sequence 2988, Ap Sequence 2988, Ap

sequence 8043, Ap Sequence 216, App Sequence 167724, Sequence 6, Appli Sequence 292, App Sequence 292, App Sequence 286, App Sequence 286, App Sequence 812, App Sequence 9103, App Sequence 9104, App Sequence 9108, App Sequ

Sequence 3,

Sequence Sequence Sequence

Sequence Sequence

1318, Ap 748, App 231472,

Sequence Sequence Sequence

Sequence 2 Sequence 2 Sequence 1

2998, Ai 124138, 200706, 265335, 265336, 265337,

Sequence 3

Sequence

1, Apr 307, App

Sequence Sequence Sequence

2003
:10:11
4 09
Nov
Tue

us-09-667-170a-440.oligo.rnpb

equence equence equence	Sequence 1,	Sequence 2, Appli Sequence 2, Appli	equence 7030, Ap	seguence z/, Appl Seguence 37276, A	equence 7510, Ap	equence 2759, Ap	equence 9092, Ap	equence 13460, A	equence 20/361,	Cyconice Zeizov, A Mience 149 Ann	equence 149. App	equence 1995, Ap	equence 275103,	equence 15476, A	equence 275104,	equence 275105,	emience 275106	ogucino 2,0100,	cquence rosos,	equence 4, Appli	equence of, Appr	equence 83, Appl	equence 49852, A	equence 13, Appl	equence 260, App	equence 471, App	equence 46670, A	equence 127407,	equence 240263.	equence 240264.	edience 240261	eductive 240263,	equence 240266,	eguence 202726,	equence 83165, A	equence 249239,	emience 249240.	emience 269074.	emience 242328	equence 7691. Ap	equence 20564. A	emience 98722. A	emience 98723. A	emience 199012	emience 220097	PONTENCE 115606	emience 115607	odremon seconds	Particle along 1	emience 267095	equence 152122	equence rolled,	ednemce se' Appl	equence 117462,	equence 151116,	equence 13694, A	equence 148380,	POT 148381	CARCINCO PACCOL.	equence 100424,	equence 100425,	equence 64, Appl	equence 99 Appl	PC-121678	educine 1518/0,	equence 151679,	equence 151680,	PC071	equence 149295,	equence 149294,	equence 161318,
10 US-09-764-877-3566 8 1	12 US-10-312-841-1	12 US-10-312-841-2 12 US-10-312-841-2	11 US-09-764-891-7030	3 US-U3-784-423-27 11 US-09-918-995-37276	10 US-09-867-701-7510	12 US-09-814-353-2759	12 US-09-814-353-9092	13 110-10-003 000 000001	11 HG-08-918-85190	9 US-09-764-887-149	14 US-10-073-961-149	11 US-09-764-891-1995	13 US-10-027-632-275103	12 US-09-814-353-15476	13 US-10-027-632-275104	13 US-10-027-632-275105	13 US-10-027-632-275106	13 US-10-027-632-152604	14 TTC-10-170-010-4	11 113-09-892-877-84	11 HS-09-092-07/1-04	11 OS-OS-OS-SS	13 US-10-027-632-49852	10 US-09-962-832-13	10 US-09-954-531-260	10 US-09-954-531-471	13 US-10-027-632-46670	13 US-10-027-632-127407	13 US-10-027-632-240263	13 US-10-027-632-240264	13 ITS-10-027-632-240265	13 TE-10-027-03E-240203	13 US-IU-UZ/-632-24UZ66	13 US-10-027-632-202726	13 US-10-027-632-83165	13 US-10-027-632-249239	13 US-10-027-632-249240	13 US-10-027-632-269074	13 US-10-027-632-242328	14 US-10-198-846-7691	12 US-09-814-353-20564	13 US-10-027-632-98722	13 US-10-027-632-98723	13 US-10-027-632-199012	13 US-10-027-632-230097	13 118-10-027-632-115606	13 US-10-027-632-115607	13 IIS-10-027-632-220066	13 US-10-027-632-220067	13 115-10-027-632-267095	13 IIS-10-027-630-153103	10 TIC 10 10 10 10 10 10 10 10 10 10 10 10 10	12 US-10-130-730-36	13 US-10-027-632-117462	13 US-10-027-632-151116	13 US-10-027-632-13694	13 US-10-027-632-148380	13 TIS-10-02-148381	13 TE-10-007-630-150404	13 TIG. 10 001 F00 110 406	13 00 110 00 111 110 110	11 US-09-774-639-64	11 US-09-969-730-99	13 TIS-10-027-632-151678	13 03-10-02/-036-1316/0	13 US-10-027-632-151679	13 US-10-027-632-151680	13 TIS-10-027-632-149293	10 110 10 100 11000	13 US-10-027-632-149294	13 US-10-027-632-161318
1.0 17217 1.0 25377 1.0 34757 1.0 114793	0.0	. O.	0.	. 0.	0.	0.				0	0.	0.	0.	٥.	0,	0.	0.	0						٥.	0.	0.	٥.	٥.	٥.	0.	0			٥.	٥.	0.	0.	0.	0.	0	0.	0.	0	0.	0	0	0	C	0	C				۰.	0.	0	0.	0				٥.	0	0		٠,	0.	0			0
163 164 23 165 23 166 23					173		176	177					182										191	192		194	195	196	197	198	199	000	200	707						207	208	209		211		213		215		217		010												229	100		231				
Sequence 180042, Sequence 49252, A Sequence 49253, A Sequence 49254, A														26,	120	395	278	973	971		395			•	Sequence	٦.		Seguence	Н	٠.	•					٠.	٠.	• •	-	-	•	• •	_	•	٠.	٠.	•	٠.		•				•		•		•	_	•	ີ .	educince 2	eguence	equence		educince of	ednence .	ednence ;	, סטעפונטפ	quence ,	ednence ;
559 13 US-10-027-632-49252 559 13 US-10-027-632-49253 559 13 US-10-027-632-49253 559 13 US-10-027-632-49254	13 US-10-027-632-635	13 US-10-027-632-635	13 US-10-02/-632-653	13 US-10-027-632-653	13 US-10-027-632-297	13 US-IO-02/-632-29/	13 US-10-027-632-308	13 US-10-027-632-119	13 US-10-027-632-119	13 US-10-027-632-258	13 US-10-027-632-111	13 US-10-027-632-111	13 US-10-027-632-160	14 US-IU-UZ3-896-Z6	13 US-IU-UZ/-632-IZ	10 US-09-764-877-39	10 US-09-764-877-2780	13 US-10-027-632-9739	13 US-10-027-632-9713	13 US-10-027-632-9	10 US-09-764-877-3956	11 US-09-764-891-94	12 US-10-311-455-20	12 US-10-311-433-20	0. TTC - 00 - TCV - 00	3 US-US-764-860-1US	14 US-10-0/4-095-10	12 US-10-017-161-20	9 US-09-747-810-1	10 US-09-880-1	12 US-09-792-616-1	12 US-10-126-7	14 TIS-10-071-1	1-1/0-01-00 51	10 08-08-820-802	10 US-09-764-847-1	14 US-10-092-154-1	14 US-10-102-524-1	10 US-09-764-847-4	14 US-10-092-1	13 US-10-027-632-4	13 US-10-027-632-2	13 US-10-027-632-6	13 US-10-027-632-2	13 US-10-027-632-1	13 US-10-027-632-1	13 US-10-027-632-2	13 US-10-027-632-1	13 US-10-027-632-8	14 US-10-106-698-7	13 US-10-027-632-1	13 US-10-027-632-1	7.30-901-01-317 21	12 TEC-10-010-010	1-26-/20-01-00 CT	13 US-IU-UZ/-63Z-I	13 US-10-027-632-1	10 US-09-764-877-2	11 US-09-822-846-6	14 US-10-198-846-1	9 TIS-09-925-302-21	20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	13 US-10-027-632-1	11 US-09-746-783-8	12 118-10-01-811 51	12 TR-10-211-4EE-1	1-60-110-011-60-21	10 US-09-764-855-2	14 IIS-10-072-349-2	12 TIGHT 0-311-4EE-2	12 US-10-311-455-2
	٦.	: -	- - -	۲:	٠.	-! -		٦.	٦.	۲.	۲.	٦.	⊣. •	-i	٠.	·	۲.	۲.	1.1	1.1	1.1	1.1		1 -			7.6	7	.1 52	. 55	.1 107	.1 162	1.1	4.4	1.1 203	0.1.	1.0	1.0	1.0	1.0	٥٠٢	1.0	1.0	0.	٥.	0.	٥.	0.	٥.	٥.	0.	0.	<b>-</b>			٠.	٠,	0.	٥.	0.	0		o .	· •	0			۰.	1.0	0.1	0.1
14444	2 2 4 4	2.5	2 4	24	7 C	4 4	24	24	24	24	77	4.	4 4	* *	7 (	4.	24	24	24	24	24	24	24	1 5	4 0	4 6	4 4	47	24	24	24	24	24	1 6	7. (	7	7	53	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	, ,	) (	9 6	2 4	23	23	23	23	0 0	43	23	23	2 6	3 6	23	23	6	4

	Sequence 1147, Ap Sequence 1034, Ap Sequence 10464, Ap Sequence 599, App Sequence 71, Appl Sequence 599, App Sequence 2147, Ap Sequence 7028, App Sequence 3, Appl	Sequence Seq	ednence ednence ednence ednence ednence ednence ednence ednence ednence	Sequence 1, Appliance 1, Appliance 1, Appliance 174763, Sequence 174763, Sequence 1751, Appliance 1751, Appliance 1751, Appliance 18162, Appliance 18162, Appliance 18162, Appliance 18163, Appliance 18163, Appliance 18163, Appliance 18163, Appliance 1816,
220025009	444949	A	વિત્તે જે તે તે તે તે તે તે તે 🗀 🦰 🦰	10 US-09-946-807-1 10 US-09-946-807-1 10 US-09-946-807-1 10 US-09-946-807-1 11 US-09-946-807-1 11 US-09-764-891-7564 11 US-09-764-891-7564 12 US-09-914-953-17553 12 US-09-814-353-18362 12 US-09-814-353-18362 12 US-09-814-353-18362 12 US-09-814-353-18362 13 US-09-814-353-18362 14 US-09-814-353-18362 15 US-09-814-353-18362 16 US-09-814-353-18362 17 US-09-918-995-17146 18 US-09-770-791-249 19 US-09-918-995-17366 11 US-09-918-995-17366 11 US-09-918-995-17366 11 US-09-918-995-17366 11 US-09-918-995-17366 11 US-09-918-995-17366 11 US-09-918-995-17366
44444444	0.			000000000000000000000000000000000000000
् छ ठामा ठाल <b>स</b> हा छ छ छ छ	333310 33221 33221 3324 3324		1 4 4 4 4 4 4 4 7 0 0 0 0 0 0 0 0 0 0 0 0	C C C C C C C C C C C C C C C C C C C
	H () ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	Sequence 102001, Sequence 103528, Sequence 103528, Sequence 103529, Sequence 11547, Sequence 1154, App Sequence 116, App Sequence 494, App Sequence 115241, Sequence 10, Appl Sequence 10, Appl Sequence 22, Appl Sequence 22, Appl Sequence 7948, App Sequence 7948, App Sequence 7948, Appl		
US- US- US- US- US- US- US-	US-10-027-632-11654; US-10-027-632-31730 US-10-027-632-26458; US-10-261-078-3 US-10-027-632-25622; US-10-027-632-51324 US-10-027-632-51326 US-10-027-632-51326 US-10-027-632-51326	US-10-027-632-1020 US-10-027-632-1035 US-10-027-632-1035 US-00-027-632-1115 US-00-198-107-3720 US-00-198-107-3720 US-00-198-119-301 US-00-967-319-301 US-00-967-632-1152 US-10-027-632-1152 US-10-027-632-1152 US-10-115-615-22 US-00-764-807-2824	US-10-311-455-134 US-10-240-452-10 US-10-311-455-136 US-10-092-154-145 US-10-311-455-206 US-10-311-455-206 US-10-311-455-172 US-10-311-455-172 US-10-311-455-14 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156 US-10-311-455-156	US-10-240-453-1 US-10-239-676-1 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-5 US-10-311-455-1 US-10-311-455-1 US-10-311-455-1 US-10-311-455-1 US-10-311-455-1 US-10-311-455-1 US-10-311-451-1 US-10-311-451-1 US-10-311-435-1 US-10-
				8866 12 8866 14 8866 14 8866 14 9372 10 9372 10 9723 12 9723 12 9723 12 11288 10 11288 10 11838 11 14841 11 15056 14 115056 14 11506 14 11
0000000000	000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000
•		ਜੰਜ ਜ ਜ ਜ ਜ ਜੇ ਜ ਜ ਜ ਜ ਜ ਜ ਜ ਜ ਜ		
14 14 14 14 14 14 14 14 1A 1A				

0 0001900000000000000000000000000000000	Sequence 14035, App Sequence 765, App Sequence 12980, Sequence 12981, Sequence 12983, Sequence 12983, Sequence 115, App Sequence 1170, App Sequence 1170, App Sequence 1170, App Sequence 1170, App Sequence 120637, Sequence 120638, Sequence 121439, Sequence 121439, Sequence 121108, Sequence 121379, Sequence 121108, Sequence 121379, Sequence 121108, Sequence 121379, Sequence 121108, Sequence 121379, Sequence 121379, Sequence 121379, Sequence 121379, Sequence 123379, Sequence 123379, Sequence 123379,
	13 US-10-02.7-62.19083 9 US-09-770-445-753 13 US-10-027-632-12998 13 US-10-027-632-12998 13 US-10-027-632-12998 13 US-10-027-632-12998 13 US-10-027-632-12998 14 US-09-64-960-1170 15 US-09-64-960-115 16 US-09-64-960-115 17 US-10-027-632-12083 18 US-10-027-632-12083 19 US-10-027-632-12063 11 US-10-027-632-12063 12 US-10-027-632-12063 13 US-10-027-632-12143 13 US-10-027-632-12143 13 US-10-027-632-12143 13 US-10-027-632-12143 13 US-10-027-632-12143 13 US-10-027-632-12143 13 US-10-027-632-12143 13 US-10-027-632-12110 13 US-10-027-632-12110 13 US-10-027-632-12110 13 US-10-027-632-12110 13 US-10-027-632-12110
a a a a a a a a a a a a a a a a a a a	, , , , , , , , , , , , , , , , , , ,
0000 0000000000 00 00 00 00000 00 00 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Sequence 34700, A Sequence 34846, A Sequence 2823, Ap Sequence 2823, Ap Sequence 317215, Sequence 317215, Sequence 12888, Ap Sequence 12888, Ap Sequence 114820, Sequence 114820, Sequence 114820, Sequence 118134, Sequence 118134, Sequence 223114, Sequence 223114, Sequence 233113, Appendence 233114, Sequence 233114, Sequence 233114, Sequence 23434, Appendence 23428, Sequence 23428, Sequence 23428, Sequence 23428, Appendence 23428, Appendence 23428, Appendence 23428, Appendence 23428, Appendence 23438, Appendence	136701, 136701, 136701, 136701, 136701, 218185, 2286436, 236436, 236436, 246666, 143606, 143606, 143606, 143606, 143606, 143606, 143606, 143606, 143606, 143606, 143606, 143606, 143606, 143606,
US-09-918-995-34700 US-09-918-995-34846 US-09-918-995-34846 US-09-918-995-34846 US-10-027-632-28957 US-10-027-632-89547 US-10-027-632-89547 US-10-027-632-89547 US-09-918-995-12888 US-00-918-995-12888 US-00-027-632-133134 US-00-918-995-12888 US-00-027-632-133134 US-00-918-995-12888 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-133134 US-00-027-632-13498 US-00-027-632-1	US-10-027-632-13771 Sequence 135701, US-10-027-632-135701 Sequence 135701, US-10-027-632-135701 Sequence 135701, US-10-027-632-13527 Sequence 135701, US-10-027-632-136135 Sequence 218185, US-10-027-632-23643 Sequence 245116, US-10-027-632-236437 Sequence 245116, US-10-027-632-236437 Sequence 245116, US-10-027-632-236437 Sequence 245116, US-10-027-632-230655 Sequence 245116, US-10-027-632-230655 Sequence 245116, US-10-027-632-230656 Sequence 143604, US-10-027-632-143604 Sequence 143604, US-10-027-632-143604 Sequence 143604, US-10-027-632-46466 Sequence 270349, US-10-027-632-270349 Sequence 270349, US-10-027-632-270350, Sequence 270350, US-10-027-632-270350
11 US-09-918-995-34400 Sequence 3477 US-09-918-995-34846 Sequence 3478 Sequence 3488 S	13 US-10-027-632-51174 Sequence 136701, 10 US-027-632-5174 Sequence 136701, 10 US-0-027-632-5174 Sequence 136701, 10 US-10-027-632-518-68 Sequence 136701, 13 US-10-027-632-24011 Sequence 218186, 13 US-10-027-632-24011 Sequence 218186, 13 US-10-027-632-24011 Sequence 240111, 13 US-10-027-632-24011 Sequence 240111, 13 US-10-027-632-24516 Sequence 24516, 13 US-10-027-632-24516 Sequence 24516, 13 US-10-027-632-24516 Sequence 24516, 13 US-10-027-632-143604 Sequence 143604, 13 US-10-027-632-143604 Sequence 143604, 13 US-10-027-632-44466 Sequence 270347, 13 US-10-027-632-270348 Sequence 270349, 13 US-10-027-632-270349 Sequence 270349, 13 US-10-027-632-270349 Sequence 270349, 13 US-10-027-632-270350 Sequence 270350, 13 US-10-027-632-270350 Sequence 270350, 13 US-10-027-632-270350
430 11 US-09-918-995-34700 Sequence 34774 431 11 US-09-918-995-34846 Sequence 34874 465 13 US-10-027-632-28933 Sequence 2293 466 13 US-10-027-632-2895-57 Sequence 2174 466 13 US-10-027-632-317215 Sequence 2174 472 11 US-09-918-995-12888 Sequence 2174 473 12 US-09-918-995-20128 Sequence 2174 482 13 US-10-027-632-114819 Sequence 2174 482 13 US-10-027-632-114819 Sequence 2174 484 11 US-09-918-995-20128 Sequence 2174 485 13 US-10-027-632-114819 Sequence 2174 486 13 US-10-027-632-114819 Sequence 2174 487 10 US-09-818-995-70128 Sequence 2174 488 11 US-09-7632-114819 Sequence 2174 489 13 US-10-027-632-114819 Sequence 2174 489 13 US-10-027-632-59434 Sequence 2174 505 13 US-10-027-632-59435 Sequence 2174 517 13 US-10-027-632-59435 Sequence 2174 518 US-10-027-632-59435 Sequence 2174 519 US-09-037-632-59435 Sequence 2174 519 US-09-037-632-59435 Sequence 2174 519 US-09-037-632-59435 Sequence 2175 510 US-09-037-632-59435 Sequence 2175 510 US-09-037-632-59435 Sequence 2175 510 US-09-037-632-59435 Sequence 2175 511 US-09-037-632-59435 Sequence 2175 512 US-09-037-632-59435 Sequence 2175 513 US-10-027-632-59435 Sequence 2175 514 US-09-037-632-59435 Sequence 2175 515 US-09-037-632-59435 Sequence 2175 517 US-09-037-632-59435 Sequence 2175 518 US-10-027-632-59435 Sequence 2175 519 US-09-037-632-59435 Sequence 2175 519 US-09-037-632-59435 Sequence 2175 519 US-09-037-632-59435 Sequence 2175 510 US-09-814-333-36732 Sequence 2175 510 US-09-814-333-36732 Sequence 2175 511 US-09-814-333-36732 Sequence 2175 512 US-09-814-333-36732 Sequence 2175 513 US-10-027-632-59439 Sequence 2175 514 US-09-814-333-36732 Sequence 2175 515 US-09-814-333-36732 Sequence 2175 517 US-09-814-333-36732 Sequence 2175 518 US-10-027-632-30652 Sequence 2175 519 US-09-814-333-36732 Sequence 2175 519 US-09-814-333-3693 Sequence 2175 519 US-09-814-333-3693 Sequence 2175 519 US-09-814-333-3693 Sequence 2175 519 US-09-814-333-3693 Sequence 2175	569 13 US-10-027-632-51174 Sequence 136701, 577 13 US-10-027-632-517701 Sequence 136701, 585 13 US-10-027-632-136701 Sequence 136701, 585 13 US-10-027-632-218186 Sequence 218186, 585 13 US-10-027-632-218186 Sequence 218186, 585 13 US-10-027-632-24011 Sequence 218186, 586 13 US-10-027-632-24011 Sequence 240111, 586 13 US-10-027-632-24011 Sequence 240111, 586 13 US-10-027-632-24011 Sequence 245716, 590 13 US-10-027-632-245716 Sequence 245716, 590 13 US-10-027-632-290656 Sequence 245716, 590 13 US-10-027-632-24546 Sequence 143603, 595 13 US-10-027-632-143604 Sequence 143603, 597 13 US-10-027-632-4466 Sequence 270347, 597 13 US-10-027-632-270348 Sequence 270349, 597 13 US-10-027-632-270349 Sequence 270349, 597 13 US-10-027-632-270350 Sequence 270350, 598 13 US-10-027-632-270350
11 US-09-918-995-34700 Sequence 34770 US-09-918-995-34846 Sequence 34870 US-09-918-995-34846 Sequence 34870 US-09-918-995-34846 Sequence 5293 US-09-027-632-9857 Sequence 3137 US-00-918-995-212857 Sequence 3137 US-09-918-995-22895 Sequence 1285 US-09-918-995-22895 Sequence 1285 US-09-918-995-22895 Sequence 1285 US-09-918-995-22895 Sequence 1285 US-09-918-995-22890 Sequence 1285 US-09-918-995-41889 Sequence 1285 US-00-027-632-11819 Sequence 1285 US-00-027-632-11819 Sequence 2928 US-00-027-632-11819 Sequence 2928 US-00-027-632-11819 Sequence 2928 US-00-027-632-283113 Sequence 2928 US-10-027-632-283113 Sequence 2938 US-10-027-632-36732 Sequence 2038 Sequence 2038 US-10-027-632-36732 Sequence 2038 Sequence 2038 US-10-027-632-36732 Sequence 2038 US-10-027-632-36732 Sequence 2038	9 569 13 US-10-027-632-51174 Sequence 136701, 9 569 13 US-10-027-632-51174 Sequence 136701, 9 577 13 US-10-027-632-136701 Sequence 136701, 9 585 13 US-10-027-632-218186 Sequence 218186, 9 585 13 US-10-027-632-218186 Sequence 218186, 9 586 13 US-10-027-632-240111 Sequence 240111, 9 586 13 US-10-027-632-240116 Sequence 246136, 9 590 13 US-10-027-632-24016 Sequence 24016, 9 597 13 US-10-027-632-144604 Sequence 143604, 9 597 13 US-10-027-632-144606 Sequence 143604, 9 597 13 US-10-027-632-14466 Sequence 270349, 9 597 13 US-10-027-632-14466 Sequence 270349, 9 597 13 US-10-027-632-270349 Sequence 270349, 9 597 13 US-10-027-632-270350 Sequence 270349, 9 597 13 US-10-027-632-270350 Sequence 270349, 9 597 13 US-10-027-632-270350
430 11 US-09-918-995-34700 Sequence 34870 430 11 US-09-918-995-34846 Sequence 34870 451 9 US-09-818-995-34846 Sequence 25293 466 13 US-10-027-632-282957 Sequence 25293 466 13 US-10-027-632-317215 Sequence 23173 13 US-10-027-632-317215 Sequence 23173 13 US-10-027-632-317215 Sequence 23173 13 US-09-918-995-20128 Sequence 1287 13 US-10-027-632-114819 Sequence 1317 13 US-10-027-632-114819 Sequence 1317 13 US-10-027-632-12743 Sequence 295 13 US-10-027-632-1255 Sequence 295 13 US-10-027-632-12743 Sequence 295 13 US-10-027-632-59435 Sequence 295 13 US-10-027-632-594 Sequence 295 13 US-10-027-632-59	0.9 569 13 05-10-027-632-136701 Sequence 136701, 0.9 569 13 05-10-027-632-136701 Sequence 136701, 0.9 577 13 US-10-027-632-136701 Sequence 136701, 0.9 585 13 US-10-027-632-13682 Sequence 136701, 0.9 585 13 US-10-027-632-218186 Sequence 218186, 0.9 586 13 US-10-027-632-240111 Sequence 240111, 0.9 586 13 US-10-027-632-240111 Sequence 240111, 0.9 586 13 US-10-027-632-240111 Sequence 240111, 0.9 586 13 US-10-027-632-240111 Sequence 246114, 0.9 586 13 US-10-027-632-240111 Sequence 246114, 0.9 590 13 US-10-027-632-290655 Sequence 246116, 0.9 590 13 US-10-027-632-24016 Sequence 240116, 0.9 597 13 US-10-027-632-144603 Sequence 24016, 0.9 597 13 US-10-027-632-144605 Sequence 24016, 0.9 597 13 US-10-027-632-144605 Sequence 24016, 0.9 597 13 US-10-027-632-144605 Sequence 270349, 0.9 597 13 US-10-027-632-270349 Sequence 270349, 0.9 597 13 US-10-027-632-270350 Sequence 270349, 0.9 597 13 US-10-027-632-270350 Sequence 270349, 0.9 597 13 US-10-027-632-270349 Sequence 270349, 0.9 597 13 US-10-027-632-270350 Sequence 270349, 0.9 597 13 US-10-027-632-270349 Sequence 270349, 0.9 597 13 US-10-027-632-270349 Sequence 270349, 0.9 597 13 US-10-027-632-270350 Sequence 270349, 0.9 597 13 US-10-027-632-270349 Sequence 1

	Sequence 134, App Sequence 134, App	134,	134,	134,	134,	134,	134,	104	, t	, to t	134,	134,	134,	134,	134,	134,	134,	134,	134	134	1 7	104	134,	134,	134	134	134	7 2 2	101	134	134,	134.	134	. 4	101	101	1 1 1	, 577	113,	113,	113	113	1 .	113,	113,	113,	113,	113	quence 113,	Juence 113,	, ,	Tuence 113,	quence 113,	quence 113,	quence 113,	quence 113,	quence 113,	quence 113,	mence 113.	mence 113.	Tience 113	Tiendo 112	Table 119	Judice 115,	duence 113,	quence 113,	puence 113,	mence 113,	mence 113.	113	dence 110,	quence 113,	quence 113,	mence 113.	quence 113,	quence 113,	quence 113,	quence 113,	ence 113,	quence 113,	
	21 0.9 1493 11 US-09-989-726-134 21 0.9 1493 11 US-09-998-156-134	0.9 1493 11 US-09-990-437-13	0.9 1493 11 US-09-991-15/+13/	0.9 1493 11 US-09-997-573-13	0.9 1493 11 US-09-991-172-1	0.9 1493 11 US-09-990-726-13	0.9 1493 11 US-09-997-559-13	0.9 L493 II US-US-US-US-US-US-US-US-US-US-US-US-US-U	C. 170 00 00 01 11 0011 00 0	0.9 1493 II US-US-SSI-854-IS	0.9 1493 II US-U9-99/-628-I3	0.9 1493 LI US-U9-99/-683-134	0.9 1493 11 US-09-989-729A-1	0.9 1493 11 US-09-997-349-13	0.9 1493 11 US-09-997-440-13	0.9 1493 11 US-09-990-440-13	0.9 1493 11 US-09-993-469-13	0.9 1493 11 US-09-997-542-1	0.9 1493 11 118-09-993-748-13	51-647-066-60-SII 11 8971 6 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.9 1493 11 US-US-39U-42/-I	0.9 1493 11 US-09-989-328-13	0.9 1493 11 US-09-993-583-1	0.9 1493 11 IIS-09-941-992-1	0.9 1493 11 US-09-992-521-1	1-555-00-SII 11 5071 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1-493-129-09-09-09-09-09-1-5044-1-5044-1-504-1-5	0.9 1493 II US-09-998-041-I	0.9 1493 11 US-09-997-585-1	0.9 1493 11 US-09-997-614-1	0 1493 12 TIS-09-989-862-13	0.0 1400 HE COLOURS OF TO THE TOTAL OF THE T	CT-CZ/-898-08-08-0ZT CZ/-CZ/-898-08-0-0ZT CZ/-CZ/-CZ/-CZ/-CZ/-CZ/-CZ/-CZ/-CZ/-CZ/-	1. 05. 06. 01. 01. 02. 02. 0. 0	11-2/0-641-01-00 ZI C611 600 C	0.9 1493 12 US-10-18/-/49-11	0.9 1493 12 US-10-194-457-11	0.9 1493 12 US-10-184-642-11	F1-747-196-101-181 12 118-147-11	1403 10 110-173-680-11	17 000 CLT OF OH OT CC** 00	U.9 1493 12 US-10-1/3-690-11	0.9 1493 12 US-10-173-691-11	0.9 1493 12 US-10-173-692-11	0.9 1493 12 US-10-173-694-11	1493 17 118 11 17 17 17 17 17 17 17 17 17 17 17 17	11-000-07-01-00 21 001 001 000 0	TT-669-67T-0T-69 2T 664T 6.0	17-/0/-5/T-OT-30 75 15-/0/-TT	0.9 1493 12 US-10-174-569-11	0.9 1493 12 US-10-174-583-11	0.9 1493 12 US-10-174-587-11	0.9 1493 12 US-10-174-589-11	0.9 1493 12 US-10-174-591-11	0.9 1493 12 US-10-175-736-11	0.9 1493 12 US-10-175-742-11	0.9 1493 12 IIS-10-175-744-11	0.9 1493 12 US-10-175-745-11	1493 12 11 11 11 11 11 11 11 11 11 11 11 11	17 01/ 6/1 01 00 18 6/11 6/0 0 0 0 11/1 01/1 01/1 01/1 01/1	11 10 11 01 00 12 00 1 00 00 00 00 00 00 00 00 00 00 00 0	TT-%C/-C/T-OT-CO ZT CATT 6.0	0.9 1493 12 US-10-176-48U-11	0.9 1493 12 US-10-176-489-11	0.9 1493 12 US-10-176-754-11	0.9 1493 12 US-10-176-755-11	0.9 1493 12 US-10-176-759-11	11-050-371-01-211 C1 5071 0 0	11-020-011-01-00 21 0211 6:0	0.9 1493 12 US-10-176-922-11	0.9 1493 12 US-10-176-924-11	0 9 1493 12 TIS-10-176-984-11	11-10-10-11-01-10 17 17 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.9 1493 12 US-1	0.9 1493 12 US	0.9 1493 12 US	0.9 1493 12 08	0.9 1493 12 U	
	601																																																																																
								_															_		_		_	_							_		-				_		_													-	_					_		_	_											-				-	
. 3	Sequence 170128, Sequence 1400. Ap	151	Sequence 158/ZI,	Sequence 250997,	Sequence 17, Appl	Sequence 17, Appl	Sequence 819, App	Sequence 3/1, App	פמקתביווכם פולי אומים	Sequence III, App	Sequence 120838,	Sequence 120839,	Sequence 120840,	Sequence 121155,	Sequence 121454,	Sequence 121455,	Sequence 30444, A	Sequence 31531, A	Semience 260234	Semience 260235		Sednence 123, App	Sequence 46, Appl	Seguence 31265, A	Semience 62 Appl	Segmence 3783. An	Semience 254484		Sequence Sinio, A	Sequence 123964,	Sequence 123965,	Segmence 123966.	Control of the contro	Somione 23 April	Sequence 33, Appr	Seducince 4030, Ap	Sequence 236369,	sequence 33, Appl	Sequence 33, Appl	Sequence 33, Appl	Semience 33 Anni	Take 100 company	ddy 'rea porrentee	Sequence 120, App	Seguence 47, Appl	25	10	7	י קר	, i	ή· η·	4	53	13	13,	13,	13,	13,	1.	ď	יי די	1 6	10	1	Ä	13	13,	13,	ř	1 6	3	13	13	12	7:	Ž,	13	133	٠,	٦	1
,i	0.9 876 13 US-10-027-632-170128 Sequence 170128, 0.9 882 14 US-10-106-698-1400 Sequence 1400. Ap	9 883 13 US-10-027-632-158720 Sequence	9 883 13 US-10-02/-632-158/Z1 sequence 9. 892 13 HS-10-027-632-324929 Sequence	9 893 13 US-10-027-632-250997 Sequence	9 895 14 US-10-125-237-17 Sequence	9 895 14 US-10-105-891-17 Sequence	9 913 14 US-10-037-270-819 Sequence	9 932 II US-UV-934-455-3/1 Sequence	ממולים ביי ממי מני מני מני מני מני מני מני מני מ	9 932 IS US-IU-Z/8-536-III sequence	9 943 I3 US-IU-UZ/-632-IZU838 Sequence	9 943 13 US-10-UZ7-632-12U839 Sequence	9 943 13 US-10-027-632-120840 Sequence	9 956 13 US-10-027-632-121155 Sequence	9 979 13 US-10-027-632-121454 Sequence	9 979 13 US-10-027-632-121455 Sequence	9 989 13 US-10-027-632-30444 Sequence	9 994 13 US-10-027-632-31531 Seguence	9 1021 13 IIS-10-027-632-260234 Semience	9 1021 13 118-10-027-632-260235 Semience		9 1034 14 US-10-09/-065-123 sequence	9 1071 9 US-09-764-853-46 Sequence	9 1127 13 US-10-027-632-31265 Sequence	9 1155 11 HS-09-764-881-62 Semience	9 1159 10 TIS-09-764-877-3783 Segmence	0 1165 13 TIG-10-027-632-254484 Geometrie	10 110 10 10 10 10 10 10 10 10 10 10 10	.9 IISI IS US-IU-02/-832-31010 Sequence	.9 1199 13 US-10-027-632-123964 Sequence	.9 1199 13 US-10-027-632-123965 Sequence	.9 1199 13 US-10-027-632-123966 Segmence	0 1008 13 TIC-10-007-630-9300 Segmente	0 1044 10 115-00-013-020-03 Somionio	.9 1244 10 US-U9-8/3-88U-33 Sequence	3 1260 10 05-09-09-09-28-2630 Sequence	. 4 1289	.9 1326 10 US-U9-984-245-33 sequence	.9 1326 11 US-09-966-262-33 Sequence	.9 1326 11 US-09-983-966-33 Sequence	9 1326 14 115-10-143-090-33	0 17 10 1 10 10 10 10 10 10 10 10 10 10 10 1		.9 1338 14 US-10-012-542-120 sequence	.9 1358 9 US-09-789-561-47 Seguence	.9 1419 13 US-10-027-632-253950 Sequence 253	.9 1465 12 US-10-171-174A-10 Sequence 10	1402 O 110 - 00 - 00 - 00 - 00 - 00 - 00 - 0	ייני בייניים איני נכני ממס מס טוד מי נמאר מי	. Taylor of the control of the contr	.9 L493 9 US-U9-989-2/9-L34 sequence 134	.9 1493 9 US-09-989-727-134 Sequence 134	.9 1493 10 US-09-989-731-134 Sequence 13	.9 1493 10 US-09-989-732-134 Sequence 134	.9 1493 10 US-09-991-073-134 Seguence 134	.9 1493 10 US-09-990-442-134 Sequence 134	.9 1493 10 US-09-991-163-134 Sequence 13	.9 1493 10 US-09-993-604-134 Seguence 134	9 1493 10 TIS-09-990-456-134 Semionde 134	9 1493 10 IIS-09-989-721-134 Secure 13-	2. 400 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17 17 17 17 17 17 17 17 17 17 17 17 17	11 14 00 00 11 10 00 00 11 10 00 00 11 10 00 0	134 TO OS-08-88-134 SEGUENCE TS	.9 1493 10 US-09-990-444-134 Sequence 134	.9 1493 10 US-09-991-181-134 Sequence 134	.9 1493 10 US-09-989-730-134 Sequence 13	.9 1493 10 US-09-990-436-134 Sequence 13	9 1493 10 IIS-09-993-687-134 Semience 13	10 10 10 10 10 10 10 10 10 10 10 10 10 1	or administration of the second secon	.9 1493 11 US-09-997-653-134 Sequence 13	.9 1493 11 US-09-993-667-134 Seguence 13	9 1493 11 TR-09-997-428-134 Segmented 13,	.v 1495 II 00-09-99/-428-154 Sequence 15	.9 1493 11 US-09-997-666-134 Sequence 13	.9 1493 11 US-09-990-438-134 Sequence 13	.9 1493 11 US-09-990-562-134 Segmence 13	.9 1493 11 US-U9-990-562-134 Sequence 1	.9 1493 11 US-09-990-711-134 Sequence 1	

$\sim$
~
14
я
н
٠.
_
9
٠Ă
$\overline{}$
`~
•
•
0
4
4
٧.
ಹ
ö
~
$\overline{\mathbf{H}}$
1
7
Ø
ō
Ť
σı
0
•
ug.
ä
7

	equence 113, equence 113, equence 113, equence 113,	equence 113, equence 113,	ence 113, ence 113,	, e ;	13,	~ ~	13,	13,	HH,	13,	13,	13,	13,	13,	13,	13,	13,	13,	ence 113,	ence 113, ence 113,	e 113,	ence 113, ence 113,	ence 113,	ence 113,		equence 113,	equence 113,	equence 113,	equence 113,	equence 113,	equence 113,	equence 113, equence 113,	equence 113,	<u>~</u> .	equence 113,	equence 113,	equence 113,	equence 113, equence 113.	equence 113,	equence 113,	m m
93 14 US-10 93 14 US-10 93 14 US-10 93 14 US-10 93 14 US-10	1493 14 US-10-187-886-11 1493 14 US-10-199-464-11 1493 14 US-10-196-756-11 1493 14 US-10-176-751-11	1493 14 US-10-176-760-11 1493 14 US-10-176-990-11	1493 14 US-10-180-541-11 1493 14 US-10-180-542-11	1493 14 US-10-180-548-11 1493 14 US-10-180-551-11	1493 14 US-10-180-999-11	1493 14 US-10-183-013-11 1493 14 US-10-184-612-11	1493 14 US-10-184-616-11. 1493 14 US-10-184-617-11	1493 14 US-10-184-622-11	1493 14 US-10-184-628-11 1493 14 US-10-184-629-11	1493 14 US-10-184-630-11	1493 14 US-10-184-631-11. 1493 14 US-10-184-632-11.	1493 14 US-10-184-636-11	1493 14 US-10-184-650-11	1493 14 US-10-184-651-11. 1493 14 US-10-187-588-11	1493 14 US-10-187-597-11	1493 14 US-10-187-598-11 1493 14 US-10-187-600-11	1493 14 US-10-187-601-11	1493 14 US-10-187-602-11.	1493 14 US-10-187-741-11.	1493 14 US-10-18/-/43-11 1493 14 US-10-187-746-11	1493 14 US-10-187-747-11	1493 14 US-10-187-753-11	1493 14 US-10-187-754-11.	1493 14 US-10-187-884-11	1493 14 US-10-188-767-11 1493 14 US-10-188-769-11	1493 14 US-10-188-770-11	1493 14 US-10-188-773-11.	1493 14 US-10-194-361-11.	1493 14 US-10-194-423-11	1493 14 US-10-195-901-11.	1493 14 US-10-195-902-11	1493 14 US-10-196-743-11. 1493 14 US-10-196-760-11.	1493 14 US-10-173-708-11	1493 14 US-10. 1493 14 US-10.	1493 14 US-10-176-916-11	1493 14 US-10-179-507-11	1493 14 US-10-179-516-11	1493 14 US-10-179-519-11 1493 14 US-10-179-525-11	1493 14 US-10-180-540-11	1493 14 US-10-180-545-11	1493 14 US-10-183-006-11. 1493 14 US-10-183-008-11.
212 212 221 221 221 221 221 221 221 221		000				00	00	00	00	00		o		00			00		00		00		00	0			00		00				0	00	. 0	0			0	00	
748 748 749 750 753 753	754 755 756	758	761	7 4 9 7	7 / 0 / 1 7 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0	766	768 769	770	771 772	773	775	776	778	779	781	782 783	784	786	787	7 89	790	792	793	795	7.97	7.98	7 00 00 00 00 00	801	802	8 0 4 4	805	807	808	80 80 80 80 80 80 80 80 80 80 80 80 80 8	811	812	813	815 815	816	817	818 819
																																			_						
Sequence 113, App Sequence 113, App Sequence 113, App Sequence 113, App Sequence 113, App Sequence 113, App Sequence 113, App	equence 113, equence 113, equence 113, equence 113,	equence 113, equence 113,	equence 113, equence 113,	equence 113, equence 113,	equence 113,	equence 113, equence 113,	equence 113, equence 113,	equence 113,	equence 113, equence 113,	equence 113,	equence 113, equence 113,	equence 113,	equence 113,	equence 113, equence 113,	equence 113,	equence 113, equence 113,	equence 113,	equence 113,	equence 113,	equence 113,	equence 113,	equence 113,	equence 113, equence 113.	equence 113,	equence 113, equence 113,	equence 113,	equence 113, equence 113.	equence 113,	equence 113,	equence 113,	equence 113,	equence 113, equence 113,	equence 113,	equence 113, equence 113,	equence 113,	equence 113,	equence 113,	equence 113, equence 113,	equence 113,	equence 113,	sequence 113, App Sequence 113, App
93 12 US-10-173-703-113 Sequence 113, 93 12 US-10-173-704-113 Sequence 113, 93 12 US-10-176-486-113 Sequence 113, 93 12 US-10-176-486-113 Sequence 113, 93 12 US-10-176-490-113 Sequence 113, 93 12 US-10-176-91-113 Sequence 113, 93 12 US-10-176-931-113 Sequence 113, 93 12 US-10-176-931-113 Sequence 113, 93 12 US-10-176-931-113	53 12 US-1U-1/6-983-113 Sequence 113, 53 12 US-10-176-988-113 Sequence 113, 53 12 US-10-179-517-113 Sequence 113, 53 12 US-10-179-521-113 Sequence 113,	3 12 US-10-202-475-113 Sequence 113, 33 13 US-10-052-586-113 Sequence 113, 33 14 US-10-173, EGO. 113	33 14 US-10-174-530-113 Sequence 113, 31 14 US-10-176-758-113 Sequence 113, 32 14 US-10-176-737-113 Sequence 113,	33 14 US-10-173-76-113 Sequence 113, 93 14 US-10-173-76-113 Sequence 113, 93 14 US-10-175-738-113 Sequence 113,	3 14 US-10-175-752-113 Sequence 113,	3 14 US-10-1/6-482-113 Sequence 113,	33	33 14 US-10-180-557-113 Sequence 113,	33 14 US-10-174-572-113 Sequence 113,	33 14 US-10-174-579-113 Sequence 113,	33 14 US-10-174-588-113 Sequence 113,	93	33 14 US-10-175-743-113 Sequence 113,	33	33 14 US-10-176-747-113 Sequence 113,	33	33 14 US-10-176-987-113 Sequence 113,	33 14 US-10-176-993-113 Sequence 113,	93	33 14 US-10-173-695-113 Sequence 113,	33 14 US-10-173-697-113 Sequence 113, 33 14 US-10-173-705-113	33 14 US-10-174-576-113 Sequence 113,	33	33 14 US-10-175-747-113 Sequence 113,	33 14 US-10-176-485-113 Sequence 113,	3 14 US-10-176-487-113 Sequence 113,	93	33 14 US-10-176-911-113 Sequence 113,	33 14 US-10-176-919-113 Sequence 113, 33 14 US-10-176-925-113	33 14 US-10-176-978-113 Sequence 113,	33	3 14 US-10-180-544-113 Sequence 113,	33 14 US-10-180-546-113 Sequence 113,	33 14 US-10-180-547-113 Sequence 113, 93 14 US-10-180-549-113 Sequence 113,	93 14 US-10-180-555-113 Sequence 113,	33 14 US-10-180-559-113 Sequence 113,	33	33 14 US-10-183-010-113 Sequence 113, 33 14 US-10-183-012-113 Sequence 113,	33 14 US-10-184-614-113 Sequence 113,	93 14 US-10-184-623-113 Sequence 113,	33
US-10-173-703-113 Sequence 113, US-10-173-704-113 Sequence 113, US-10-176-486-113 Sequence 113, US-10-176-490-113 Sequence 113, US-10-176-490-113 Sequence 113, US-10-176-991-113 Sequence 113, US-10-176-981-113 Sequence 113, US-10-176-981-113	.9 1493 12 US-1U-1/6-983-113 Sequence 113, .9 1493 12 US-1U-179-518-113 Sequence 113, .9 1493 12 US-1U-179-517-113 Sequence 113, .9 1493 12 US-1U-179-521-113 Sequence 113,	.9 1493 12 US-10-202-475-113 Sequence 113, 19 1493 13 US-10-0-52-586-113 Sequence 113, 0 1403 14 US-10-174-E04-113	1453 14 US-10-174-390-113 Sequence 113, 9 1493 14 US-10-176-758-113 Sequence 113, 9 1403 14 US-10-175-737-113	.9 1493 14 US-10-175-706-113 Sequence 113, 9 1493 14 US-10-173-706-113 Sequence 113, 9 1493 14 US-10-175-738-113	9 1493 14 US-10-175-750-113 Sequence 113,	.9 1493 14 US-10-176-482-113 Sequence 113,	.9 1493 14 US-10~176-913-113 Sequence 113, .9 1493 14 US-10-180-552-113 Sequence 113,	.9 1493 14 US-10-180-557-113 Sequence 113,	.9 1493 14 US-10-1/4-572-113 Sequence 113,	9 1493 14 US-10-174-579-113 Sequence 113, 9 1493 14 US-10-174-589-113	.9 1493 14 US-10-174-588-113 Sequence 113,	.9 1493 14 US-10-175-739-113 Sequence 113, 9 1493 14 US-10-175-740-113	.9 1493 14 US-10-175-743-113 Sequence 113,	.9 1493 14 US-10-176-488-113 Sequence 113, .9 1493 14 US-10-176-492-113 Sequence 113,	.9 1493 14 US-10-176-747-113 Sequence 113,	.9 1493 14 US-10-176-750-113 Sequence 113, .9 1493 14 US-10-176-985-113 Sequence 113,	.9 1493 14 US-10-176-987-113 Sequence 113,	.9 1493 14 US-10-176-993-113 Sequence 113,	.9 1493 14 US-10-184-658-113 Sequence 113, .9 1493 14 US-10-176-991-113 Semience 113	.9 1493 14 US-10-173-695-113 Sequence 113,	.9 1493 14 US-10-173-697-113 Sequence 113,	.9 1493 14 US-10-174-576-113 Sequence 113,	.9 1493 14 US-10-174-585-113 Sequence 113, .9 1493 14 US-10-174-586-113 Sequence 113.	.9 1493 14 US-10-175-747-113 Sequence 113,	.9 1493 14 US-10-176-485-113 Sequence 113,	.9 1493 14 US-10-176-487-113 Sequence 113,	.9 1493 14 US-10-176-493-113 Seguence 113, .9 1493 14 US-10-176-756-113 Seguence 113.	.9 1493 14 US-10-176-911-113 Sequence 113,	.9 1493 14 US-10-176-919-113 Sequence 113,	.9 1493 14 US-10-176-978-113 Sequence 113,	.9 1493 14 US-10-179-510-113 Seguence 113, .9 1493 14 US-10-180-543-113	.9 1493 14 US-10-180-544-113 Sequence 113,	.9 1493 14 US-10-180-546-113 Sequence 113,	.9 1493 14 US-10-180-547-113 Sequence 113, .9 1493 14 US-10-180-549-113 Sequence 113,	.9 1493 14 US-10-180-555-113 Sequence 113,	.9 1493 14 US-10-180-559-113 Sequence 113,	.y 1493 14 US-10-181-000-113 Seguence 113, 9 1493 14 IR-10-183-010-113	.9 1493 14 US-10-183-010-113 Sequence 113,	.9 1493 14 US-10-184-614-113 Sequence 113,	.9 1493 14 US-10-184-623-113 Sequence 113,	.9 1493 14 US-10-184-635-113 Sequence 113, .9 1493 14 US-10-184-637-113 Sequence 113,

Sequence 113, App Sequence 113, App Sequence 113, App Sequence 113, App	113,	113, 113,	113,	113,	113,	113,	113,	113.	113,	113,	113,	113,	113,	113,	113,	113,	113,	113.	112	, ,	113,	, 611	113,	113,	113,	113,		, 5.1.1.	113,	113,	0 1 1	1 1 1	011	113,	113,	113	113,	, , ,	, , , ,	113,	113,	113.	113	113	, ,	, , ,	113,	113,	113,	113	113	1 4 4 4	1 1	, , , ,	113,	113,	113,	113,	113,	113,	113	1 1	, 677	113,	113		0 6	113,	113,	113,	117	, ,	113,	113,	1011
US-10-205-504-113 US-10-205-509-113 US-10-205-895-113 US-10-205-899-113	0-202-000	)-205-909 )-195-890	183-002	)-184-621 )-184-638	1-187-752	187-887	7-194-461 7-195-890	1-196-751	1-197-694	1-197-697	1-197-707	1-199-303	1-199-318	1-199-458	1-199-462	0-201-324	0-201-328	-201-527	1-201-528	201-201	201-201-22	000-100-0	1-202-4UB	1-202-409	0-202-411	1-202-472	100-	205-502-6	)-205-507	)-205-511	202-202-0	200-004-0	700-00-0	7-194-456	0-196-758	0-198-770	199-308	7-006-6	/ TQ-007-0	7-205-893	)-205-897	1-196-754	0-174-571	76-746	20-36-0	100 COL C	7-183-CTT	)-184-633	)-184-639	1-187-742	187-748	24 / 24 / 24 / 24 / 24 / 24 / 24 / 24 /	001	11110011	100-241-000	900-76T-0	7-192-009	)-192-012	0-192-014	0-192-016	1-194-362	100	1-134-364	-194-395	1-194-424	037.701-0	004-461-0	7-174-4D7	-194-488	)-195-886	195-801	760-067-0	1-196-746	1-196-752	00 T - 00 T - 0
8888 833 8444 8444			н,	<b>⊣</b> ⊢	-	Н.	٦.	٠,	ı <del></del>	Н	1	Н	Н	Н	-1	Н	٦.	٦	-	- 1	- ۲	٠,	٠,	-	-	Н	-	٠,	-	٦	-	4 -	٠,	_	-	٦	-		٠,	٦		-	-	-	٠,	٠,	٠.	-1	~	-		٠,	1 -	٠,	٠,	٠,	٦	-		-	-	٠,	-1	<del></del> 1	-	۱ -	4 +	4		Н	-	٠,	-	П	٠,
1499 1499 1499 1699	49	49	49	4, 4, V Q	4 9	94.	4, 4 V Q	4.9	49	49	49	49	49	49	49	49	49	94	9	10	7 0	, נ	4 V	43	49	4	1 5	7, 4	4	49	9	4 4	, (	9	49	4	4	0	n (	4. 2	49	49	49	4	10	7 0	4. Σ	9	49	4	9	4 4	1 0	,	4. ·	λ, .	4. V	4	49	49	9	, (	4. Σ	49	4	0	, (	4. V	σ	g	σ	n (	<u>ار</u>	g	١c
0000														•							•	•	٠	٠	•			٠		•		•	•	٠					٠	•	•				•	•	•	•	٠			•	•	•	٠	٠	٠	•					•					٠					•	•	•
2222	21	21	21	21	21	27	7 1 2	21	21	21	21	21	21	21	21	21	21	21	1,	1 5	1 5	4 r	7 7	7.7	27	21	1 0	7 7	21	21	1.	1 5	1 .	7.7	21	21	2.	7	7.7	77	21	21	21	21	4 -	1 6	17	77	21	2.1	10	1 5	; ;	4 :	7 7	7 7	77	27	21	21	2.	1 .	7.7	21	23	1 5	7 6	77	21	21		1 6	7.7	21	1 5
88 88 88 89 89 89 89 84 84 89 89	0 1	S O	0	0 0	0	0 0	<b>&gt; C</b>	0	0	0	$\vdash$	Н	7	Ч	Н	н	-	н	-		10	V (	V	V	S	N	ıc	V	3	$^{\circ}$	C	10	10	3	3	m	m	~	2	η.	m	3	m	3	7	۲ ۲	4,	4	4	4	4	٠ ٦	٠,	٠,	# ,	# 1	v	S	S	S	ď	ונ	Ω	വ	ъ	u	n L	v.	9	9	• •	o١	9	9	o u
																							_		_	_																					_		_	_		_						-		_				_					-	_		_			
App App App	App	App App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	Ann	44.4	d'de e		App	App	App	App	Arr.	APP	App	App	and and	444	77.	App	App	App	App	425	ਪ੍ਰੋਹਿੰਦ ਹੈ	App	App	App	App	App	22.	444	dor.	App	App	App	Ann	400	44.4	dde	App	d'ur	App	App	App	App	Ann.	44.	App	App	App	722	444	App	App	App	400	7.1	App	App	7.00
113, 113, 113, 113,	113,	ກໍຕັ	113,	113,	113,	113,	113,	113,	113,	113,	113,	113,	113,	113,	113,	113,	113,	113	113	112	1117	113, APP	113,	113,	113,	113,	112	,,,,	113,	113,	113	117		113,	113,	113,	113.	113	0 (	113,	113,	113,	113.	113.	1117	110	, 511	113,	113,	113.	113	112	110	7 7 7	1177	, , , ,	113,	113,	113,	113,	113	1	113,	113,	113.	1112	7 7 7	, , ,	113,	113,	113	, , ,	113,	113,	110
)-183-017-113 )-183-019-113 )-184-618-113 )-184-625-113	3-184-626-113 Sequence 113,	J-184-62/-113 Sequence 113, J-184-645-113 Sequence 113,	3-184-654-113 Sequence 113,	0-164-653-113 Sequence 113, 0-188-774-113 Sequence 113,	3-188-775-113 Sequence 113,	0-194-462-113 Sequence 113,	0-196-740-113 Semience 113,	0-197-695-113 Sequence 113,	0-195-894-113 Sequence 113,	0-176-484-113 Sequence 113,	0-176-753-113 Sequence 113,	0-176-917-113 Sequence 113,	J-176-982-113 Sequence 113,	0-179-506-113 Sequence 113,	0-179-513-113 Sequence 113,	0-179-514-113 Sequence 113,	0-179-522-113 Sequence 113,	0-180-556-113 Sequence 113,	0-180-560-113 Semience 113	7 183-015-113 Semience 113	7-103-013-113 7-184-615-113 Company 113	orducine its, App	J-184-520-113	J-184-643-113	)-184-656-113 Sequence 113,	0-192-010-113 Sequence 113,	201-2018-113 Cemience 113	3 100 ord 113	J-186-855-113 Sequence 113,	)-187-599-113 Sequence 113,	3-187-750-113 Semience 113	7.108-780-113 Segment 113	ייים איניים איני	J-192-015-113	J-194-394-113 Sequence 113,	0-194-425-113 Sequence 113,	0-194-485-113 Sequence 113.	3-195-885-112	מבל מסט ומדי מפל ומדי	J-195-899-113	J-196-748-113 Sequence 113,	0-196-750-113 Sequence 113,	0-197-699-113 Segmence 113.	0-197-700-113 Segmence 113.	197-705-113 Semience 113	0.400, 700, 110, 0.00, 0.00, 110, 0.00,	'STAN-100-TTS SEGUETICE TTS'	3-198-764-113 sequence 113,	0-198-765-113 Sequence 113,	0-198-768-113 Segmence 113.	0-198-769-113 Semence 113.	0-199-305-113 Semience 113	100-206-113	100 110 110 110 010 010 010 010 010 010	100 211 113	offstall sequence its,	J-133-314-113	U-199-317-113 Sequence 113,	0-199-665-113 Sequence 113,	0-199-666-113 Sequence 113,	0-199-669-113 Semience 113	0.100 CON 110 CONTROL 110 CONT	0-201-534-113	0-201-770-113 Sequence 113,	0-201-855-113 Segmence 113.	0-201-856-113 Gemience 113	100 400 110 000 000 000 000 000 000 000	0-202-409-113	0-202-470-113 Sequence 113,	0-202-476-113 Sequence 113,	0-202-934-113 Semience 113	0-202-303-113	0-202-935-113 Sequence 113,	0-202-936-113 Sequence 113,	0-202-030-113 Cemience 112
US-10-183-017-113 Sequence 113, US-10-183-019-113 Sequence 113, US-10-184-618-113 Sequence 113, US-10-184-625-113 Sequence 113,	US-10-184-626-113 Sequence 113,	US-10-184-627-113 Sequence 113, US-10-184-645-113 Sequence 113,	US-10-184-654-113 Sequence 113,	US-10-184-653-113 Sequence 113, US-10-188-774-113	US-10-188-775-113 Sequence 113,	US-10-194-462-113 Sequence 113,	US-10-196-762-113 Seguence 113,	US-10-197-695-113 Sequence 113,	US-10-195-894-113 Sequence 113,	US-10-176-484-113 Sequence 113,	US-10-176-753-113 Sequence 113,	US-10-176-917-113 Sequence 113,	US-10-176-982-113 Sequence 113,	US-10-179-506-113 Sequence 113,	US-10-179-513-113 Sequence 113,	US-10-179-514-113 Sequence 113,	US-10-179-522-113 Sequence 113,	US-10-180-556-113 Sequence 113,	11S-10-180-560-113 Semi-pro- 113	TIS-10-183-015-113 Semisorce 113	110-10-104-615-113 Segmente 113,	TO 10 100 113 COURT OF COURT OF THE STATE OF	US-IN-IN-IN-IN-IN-IN-IN-IN-IN-IN-IN-IN-IN-	US-10-184-643-113 Sequence 113,	US-10-184-656-113 Sequence 113,	US-10-192-010-113 Sequence 113,	TIG-10-205-312 Cemience 112	USTIO-203-300 SEGUETTS SEGUETTS 113,	US-10-186-855-113 Sequence 113,	US-10-187-599-113 Sequence 113,	11S-10-187-750-113 Semience 113	113-10-128-720-113	TI 10 100 01E 113	US-IU-192-UIS-II3	US-10-194-394-113 Sequence 113,	US-10-194-425-113 Sequence 113,	US-10-194-485-113 Segmence 113;	115-10-195-885-112	מבי המי שנה מסי הבי ממיתופונים דדמי	US-IU-ISS-889-II3	US-10-196-748-113 Sequence 113,	US-10-196-750-113 Sequence 113,	US-10-197-699-113	US-10-197-700-113 Segmence 113.	TIS-10-197-705-113	TE-10-107-700-713	US-10-19/-/US-113	US-10-198-764-113	US-10-198-765-113 Sequence 113,	US-10-198-768-113 Segmence 113.	US-10-198-769-113 Semience 113.	11S-10-199-305-113 Semi-pure 113	TIC-10-100-20F-113	10 10 10 10 11 11 11 11 11 11 11 11 11 1	TTO 10 100 511 115	no-10-139-511-115	US-10-199-514-113	US-10-199-317-113 Sequence 113,	US-10-199-665-113	US-10-199-666-113 Sequence 113,	US-10-199-669-113 Semience 113	110 - 0 - 110 - 0 - 110 - 0 - 110 - 0 -	US-IN-ZOI-334-II3 Sequence II3,	US-10-201-770-113 Sequence 113,	US-10-201-855-113 Segmence 113.	TIS-10-201-856-113	ייניי שמייניים מייניים	us-10-202-469-113	US-10-202-470-113 Seguence 113,	US-10-202-476-113 Seguence 113,	IIS-10-202-934-113 Semience 113	TIC 10-10-00 00E 110	US-10-202-935-113 Sequence 113,	US-10-202-936-113 Seguence 113,	TIG-10-202-439-113 Ceguence 113
493 14 US-10-183-017-113 Sequence 113, 493 14 US-10-184-618-113 Sequence 113, 493 14 US-10-184-618-113 Sequence 113, 493 14 US-10-184-625-113 Sequence 113,	493 14 US-10-184-626-113 Sequence 113,	493 14 US-10-184-62/-113 Sequence 113, 493 14 US-10-184-645-113 Sequence 113,	493 14 US-10-184-654-113 Sequence 113,	493 14 US-10-188-774-113 Sequence 113,	493 14 US-10-188-775-113 Sequence 113,	493	493  14  11S-10-196-743-113 Semience 113,	493 14 US-10-197-695-113 Sequence 113,	493 14 US-10-195-894-113 Sequence 113,	493 14 US-10-176-484-113 Sequence 113,	493 14 US-10-176-753-113 Seguence 113,	493 14 US-10-176-917-113 Sequence 113,	493 14 US-10-176-982-113 Sequence 113,	493 14 US-10-179-506-113 Sequence 113,	493 14 US-10-179-513-113 Sequence 113,	493 14 US-10-179-514-113 Sequence 113,	493 14 US-10-179-522-113 Sequence 113,	493 14 US-10-180-556-113 Sequence 113,	493 14 IIS-10-180-560-113 Segmente 113	193 14 IIS-10-183-015-113 Sections 113	193 14 IIG-10-184-615-113 Sequence 113,	446 (117) 3111 CONTRACTOR 117) 311	193 IA US-IU-184-620-IIS SEQUENCE IIS,	193 14 US-10-184-643-113 Sequence 113,	193	193 14 US-10-192-010-113 Sequence 113,	193 14 IIG-10-20E-013 Company 113	133 IN USTICE TOST SEQUENCE TIS	193 14 US-10-186-855-113 Sequence 113,	493 14 US-10-187-599-113 Sequence 113,	193 14 IIS-10-187-750-113 Semience 113	193 14 175-10-188-780-113 Secure 113	200 11 10 10 10 01 110 00 110 00 00 110 00 110	#93 14 US-IU-192-UIS-II3 Seguence II3,	493 14 US-10-194-394-113 Sequence 113,	493 14 US-10-194-425-113 Sequence 113,	493 14 US-10-194-485-113 Segmence 113.	493 14 11S-10-195-885-113 Semionre 113	THE CONTRACTOR OF THE CONTRACT	#93 I4 US-IU-ISS-899-II3 Sequence II3,	493 14 US-10-196-748-113 Sequence 113,	493 14 US-10-196-750-113 Sequence 113,	493 14 US-10-197-699-113 Sequence 113.	493 14 US-10~197-700-113 Segmence 113.	493 14 IIS-10-197-705-113 Semiance 113	402 14 110-10-10-100-113 00-113	'ST TA COLTOLIS SEGUETTS SEGUETTS TEST	493 14 US-10-198-/64-113 Seguence 113,	493 14 US-10-198-765-113 Sequence 113,	493 14 US-10-198-768-113 Segmence 113.	493 14 US-10-198-769-113 Semience 113.	493 14 IIS-10-199-305-113 Semience 113	402 14 III-100-20E-113	101 11 00-10-100 010 110 00-110 010 110 1	493 14 08-10-199-510-115 Sequence 113,	155 14 US-IN-ISS-SIT-IIS SEQUENCE IIS,	tas re-ro-ray-sit-iis seducince iis	493 14 US-10-199-317-113 Sequence 113,	493 14 US-10-199-665-113 Sequence 113,	493 14 US-10-199-666-113 Sequence 113,	493 14 US-10-199-669-113 Semience 113	1 1 10 10 11 11 11 11 11 11 11 11 11 11	435 14 US-IU-201-334-II3 Seduence II3,	493 14 US-10-201-770-113 Sequence 113,	493 14 US-10-201-855-113 Segmence 113.	493 14 TIS-10-201-856-113 Compose 113	400 44 10 10 10 10 110 110 000 410 110 000 110 11	153 If US-10-202-469-IIS Sequence IIS,	493 14 US-10-202-470-113 Seguence 113,	493 14 US-10-202-476-113 Seguence 113,	493 14 IIS-10-202-934-113	200 E3 OH FO-808 204-E10 GGGGGGGG F107	493 14 US-10-202-935-113 Sequence 113,	493 14 US-10-202-936-113 Seguence 113,	493 14 TIS-10-202-939-113 Geometric 112
.9 1493 14 US-10-183-017-113 Sequence 113, 19 1493 14 US-10-184-518-113 Sequence 113, 19 1493 14 US-10-184-618-113 Sequence 113, 1493 14 US-10-184-625-113 Sequence 113, 1993 14 US-10-184-625-113	.9 1493 14 US-10-184-626-113 Sequence 113,	.9 1493 14 US-10-184-627-113 Sequence 113, .9 1493 14 US-10-184-645-113 Sequence 113,	.9 1493 14 US-10-184-654-113 Sequence 113,	.9 1493 14 US-10-188-774-113 Sequence 113,	.9 1493 14 US-10-188-775-113 Sequence 113,	.9 1493 I4 US-10-194-462-113 Sequence 113,	.9 1493 14 [IS-10-196-762-113 Semience 113,	.9 1493 14 US-10-197-695-113 Sequence 113,	.9 1493 14 US-10-195-894-113 Sequence 113,	.9 1493 14 US-10-176-484-113 Sequence 113,	.9 1493 14 US-10-176-753-113 Sequence 113,	.9 1493 14 US-10-176-917-113 Sequence 113,	.9 1493 14 US-10-176-982-113 Sequence 113,	.9 1493 14 US-10-179-506-113 Sequence 113,	.9 1493 14 US-10-179-513-113 Sequence 113,	.9 1493 14 US-10-179-514-113 Sequence 113,	.9 1493 14 US-10-179-522-113 Sequence 113,	.9 1493 14 US-10-180-556-113 Sequence 113,	.9 1493 14 HS-10-180-560-113 Semience 113	9 1493 14 TIS-10-183-015-113 Semience 113	. 1493 14 11G-10-104-615-113 Company 113	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	the collection of the collecti	.9 1493 14 US-10-184-643-113 Sequence 113,	.9 1493 14 US-10-184-656-113 Sequence 113,	.9 1493 14 US-10-192-010-113 Seguence 113,	9 1493 14 HG-10-206-313 Company 113	1410 14 CO-100-113 Sequence 113,	.9 1493 14 US-10-186-855-113 Sequence 113,	.9 1493 14 US-10-187-599-113 Sequence 113,	9 1493 14 IIS-10-187-750-113	. 9 1493 14 11S-10-108-1280-1381 41 5941 9.	COLUMN TELEVISION COLUMN COLUM	.9 1493 14 US-10-192-015-113 Sequence 113,	.9 1493 14 US-10-194-394-113 Sequence 113,	.9 1493 14 US-10-194-425-113 Sequence 113.	.9 1493 14 US-10-194-485-113 Section 113:	9 1493 14 HS-10-195-885-113	ייין איני איני פון	Sequence 113,	.9 1493 14 US-10-196-748-113 Sequence 113,	.9 1493 14 US-10-196-750-113 Sequence 113,	.9 1493 14 US-10-197-699-113 Segmence 113.	.9 1493 14 US-10~197-700-113 Sequence 113.	9 1493 14 IIS-10-197-705-113 Semisore 113	0 1402 14 115-10-10-10-10-10-10-10-10-10-10-10-10-10-	. Table 14 Control 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 10	.9 1493 14 US-10-198-764-113 Sequence 113,	.9 1493 14 US-10-198-765-113 Sequence 113,	.9 1493 14 US-10-198-768-113 Segment 113.	.9 1493 14 US-10-198-769-113 Semience 113.	9 1493 14 IIS-10-199-305-113 Segmente 113	0 1403 14 775-10-100-206-113	THE COLL TO THE TOTAL THE COLLECTION OF THE COLL	THE TAX THE TOTAL TO THE TAX THE CONTROL TO THE TAX TH		. S It OS-IO-ISS-SI4-IIS Sequence IIS,	.9 1493 14 US-10-199-317-113 Sequence 113,	.9 1493 14 US-10-199-665-113 Sequence 113,	.9 1493 14 US-10-199~666-113 Sequence 113,	.9 1493 14 US-10-199-669-113 Semience 113	1014 (0010) (014 100 100 100 100 100 100 100 100 100		.9 1493 14 US-10-201-770-113 Sequence 113,	.9 1493 14 US-10-201-855-113 Segment 113.	9 1493 14 IIS-10-201-856-113 Semicro 113	CTT DOTTONION OF COLUMN TO THE	sequence its	.9 1493 14 US-10-202-470-113 Sequence 113,	.9 1493 14 US-10-202-476-113 Seguence 113,	.9 1493 14 IIS-10-202-934-113	CIT CONTOURNED COTT TO A TO COTT TO A TO COTT	.9 1493 14 0S-10-202-935-113 Sequence 113,	.9 1493 14 US-10-202-936-113 Sequence 113,	9 1493 14 175-10-202-939-113 Section 113
Sequence 113, Sequence 113, Sequence 113, Sequence 113,	0.9 1493 14 US-10-184-626-113 Sequence 113,	0.9 1493 14 US-10-184-627-113 sequence 113, 0.9 1493 14 US-10-184-645-113 Sequence 113,	0.9 1493 14 US-10-184-654-113 Sequence 113,	0.9 1493 14 US-10-188-774-113 Sequence 113, 0.9 1493 14 US-10-188-774-113	0.9 1493 14 US-10-188-775-113 Sequence 113,	0.9 1493 14 US-10-194-462-113 Seguence 113,	0.9 1493 14 TS-10-196-762-113 Seguence 113,	0.9 1493 14 US-10-197-695-113 Sequence 113,	0.9 1493 14 US-10-195-894-113 Sequence 113,	0.9 1493 14 US-10-176-484-113 Seguence 113,	0.9 1493 14 US-10-176-753-113 Sequence 113,	0.9 1493 14 US-10-176-917-113 Sequence 113,	0.9 1493 14 US-10-176-982-113 Sequence 113,	0.9 1493 14 US-10-179-506-113 Sequence 113,	0.9 1493 14 US-10-179-513-113 Sequence 113,	0.9 1493 14 US-10-179-514-113 Sequence 113,	0.9 1493 14 US-10-179-522-113 Sequence 113,	0.9 1493 14 US-10-180-556-113 Sequence 113,	0.9 1493 14 HS-10-180-560-113 Semisorce 113	0 9 1493 14 TS-10-183-015-113 Semiono 113	0.0 1402 14 110-10-103-413 Sequence 113,	7/45 17 17 17 17 17 17 17 17 17 17 17 17 17	1495 14 US-11-1041-020-113 Sequence 113,	0.9 1493 14 US-10-184-643-113 Sequence 113,	0.9 1493 14 US-10-184-656-113 Sequence 113,	0.9 1493 14 US-10-192-010-113 Sequence 113,	0 9 1403 14 HG-10-205-008-113	C.5 1495 14 CS-10-209-300-115 Sequesice 115,	0.9 1493 14 US-10-186-855-113 Sequence 113,	0.9 1493 14 US-10-187-599-113 Sequence 113,	0.9 1493 14 IIS-10-187-750-113 Semience 113	0.9 1493 14 IIS-10-188-780-113 Semionre 113	COLUMN AND THE COLUMN	0.9 1493 14 US-IU-192-113 Sequence 113,	0.9 1493 14 US-10-194-394-113 Sequence 113,	0.9 1493 14 US-10-194-425-113 Sequence 113,	0.9 1493 14 US-10-194-485-113 Segmente 113.	0 9 1493 14 TIS-10-195-885-113 Semionre 113	TOTAL DATE OF THE COOK FOR ALL COOK OF THE	C.9 1493 14 US-10-195-889-113 Sequence 113,	0.9 1493 14 US-10-196-748-113 Sequence 113,	0.9 1493 14 US-10-196-750-113 Sequence 113,	0.9 1493 14 US-10-197-699-113 Segmente 113.	0.9 1493 14 US-10~197-700-113 Segmence 113.	0 9 1493 14 TIS-10-197-205-113	0 0 1402 14 110-10-10-1-20 00-1-4-2 00-1	120 1400 14 02-10-110 Sequence 110	0.9 1493 14 US-10-198-764-113 Sequence 113,	0.9 1493 14 US-10-198-765-113 Sequence 113,	0.9 1493 14 US-10-198-768-113 Segmence 113.	0.9 1493 14 US-10-198-769-113 Semience 113	0.9 1493 14 11S-10-199-305-113 Semionoe 113	0 0 1403 14 TIS-110-100-205-113 Securior 113	10.1 P. 10.1 P	CONTRACTOR THE CONTRA	real rate of the rate of the real rate of the rate of the real rate of the real rate of the real rate of the rate of the real rate of the ra	ors 1455 It OS-10-139-314-113 Sequence 113,	0.9 1493 14 US-10-199-317-113 Sequence 113,	0.9 1493 14 US-10-199-665-113 Sequence 113,	0.9 1493 14 US-10-199-666-113 Sequence 113,	0.9 1493 14 US-10-199-669-113 Semience 113	1011 1011 1011 1011 101 101 101 101 101	0.9 1495 14 0S-IO-ZOI-554-115 Sequence 1137	0.9 1493 14 US-10-201-770-113 Sequence 113,	0.9 1493 14 US-10-201-855-113 Segmence 113.	0 9 1493 14 TIS-10-201-856-113 Serience 113	COLUMN AND AND AND AND AND AND AND AND AND AN	reducing the control of the control	0.9 1493 14 US-10-202-470-113 Sequence 113,	0.9 1493 14 US-10-202-476-113 Sequence 113,	0.9 1493 14 HS-10-202-934-113 Section 113	COLUMN TO COLUMN	0.9 1493 14 0S-10-202-935-113 Sequence 113,	0,9 1493 14 US-10-202-936-113 Seguence 113,	0 9 1493 14 115-10-202-113 Semiconfe 113

ω

TOAN GITCA GOVERNMENT OF THE PROPERTY OF THE PROPERTY AND A PROPER	GGAGGTTGAAGT	AAGGAAAAAAGGAAAGGAAAAAAGGAGAGGGAAATTCCAGGCCAATTGT		121 CATAGATITATCATAJICTGGAITITITGGAITCTITTGTTTTCTCATCATGGAITCA 180	21 CATAGATTTTATCATATTCTGGATTTTTTGGATTCTTTTTTTT	GGAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGT	81 GGAAAGCCTGTTGTGCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTT	AGGCTGCCTTCCCTGGGGAACAAGGAGCCACCTGGGGCAGGAAGGA	Tracetroceragadenadadadenagadenagaden	301 GCCTTTTCAGGAAGAGACGCCTTTTCAGGAAGAGAGAAAAGTGCAGCTGAAGAGGAAAGTC 360	MAGAGACGCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGAAA	GAAT	)TGAGGGGGGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTT	421 TCTCCTAAGGGGTGCTCCAGAACACGGGCAGGCTGGGCATGTCTCTGACCATCTGGACG 480	GGCATGTCTCTGACCATCTG	481 GTGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATA 540	STGGGGTCCTGTCACTATTGGAGCTTTGTCTTATGCTGAATTGGGAACAA	AAGAAATCIGGAGGTCATTACACATATATTTGGAAGTCTTTGGTCCATTACCAGCTTTT 6	Independent ALTACARATATITIGGARGICTITIGGICCATTACCAGCTITIT 60	601 GIACORGICIGOS CONTROLOCIO DE CONTROLOCIO CONTROLOCIO DE CONTRO	GCATTTGGACGCTACATTCTTGGAACCATTTTTTATTCAATGGAATGCGATGTAATGAAATGTAAATGAAACGATACAAATGAAACGAAACCAATTTTTTATTAAAACGAAACCAATTTTTTAAATGAAAACGAAACGAAACGAAATGAAAATGAAAATGAAAATGAAAAAAAA	61 GCAITTGGACGCTACATTCTGGAACCATTTTTATTCAATGTGAAATCCCTGAACTTGCG 72	ATCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGGATGTC 78.	1 ATCAAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTCATTACAGCTTCATTACAGCTTCATTACAGCTCATTACAGCTTCATTAC	1 AGCIGGACACACACATACATATATATATATATATATATATATAT	1 AGCTGGAGCGCCCGGATCCAGATTTTCTTAAACTTTTGTAAACTTAACAATTTTCTTAAAACTTTTTGTAAACTTAACAATTTTCTTAAACTTAACAATTTTCTTAAAACTTTAACAAATTTTCTTAAAACTTAACAAATTTTCTTAAAACTTAACAAATTTTCTTAAAACTTAACAAATTTTCTTAAAAACTTAACAAATTTTCTTAAAAACTTAACAAATTTTCTTAAAAAA	1 ATTATAGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGC 90	41 ATTATAGCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	1   1   1   1   1   1   1   1   1   1	OI TITTO POR CARACTATION CONTRACTOR TO CONTRACTATION OF THE CONTRACTATIO		61 GCATAT	ACCATTTCCCTTTACAをはまれる事業のできます。 100	021 ACCATTCCCCTTGCAATATGTATAT
ò	qu qu	ŏ	qq	δλ	dO .	Š	qq	ð	ОD	δλ	qq	δλ	дg	ò	qq	δλ	qa	8 8	3 8	දු පු	ò	: A	ò	: 음	ò	5 연	ò	- qa	خ ا	7. DP	è	SP G	ò	qo Ç
.9 1493 14 US-10-196-761-113 Sequence 113, .9 1493 14 US-10-197-692-113 Sequence 113,	0.9 1493 14 US-10-197-693-113 Sequence 113, App 0.9 1493 14 US-10-197-696-113 Sequence 113, App 0.9 1493 14 US-10-197-696-113 Sequence 113, App	.9 1493 14 US-10-197-703-113 Sequence 113, .9 1493 14 US-10-197-711-113 Sequence 113,	.9 1493 14 US-10-198-757-113 Sequence 113, .9 1493 14 US-10-198-761-113 Sequence 113,	.9 1493 14 US-10-198-762-113 Sequence 113,	.9 1493 14 US-10-198-767-113 Sequence 113, 9 1493 14 US-10-199-301-113 Sequence 113, 0 150 150 150 150 150 150 150 150 150 1	.9 1493 14 US-10-199-312-113 Sequence 113,	.9 1493 14 US-10-199-315-113 Sequence 113,	.9 1493 14 US-10-199-457-113 Sequence 113,	.9 1493 14 US-10-199-460-113 Sequence 113, .9 1493 14 US-10-199-461-113 Sequence 113,	.9 1493 14 US-10-199-667-113 Sequence 113, .9 1493 14 US-10-199-673-113 Sequence 113,	.9 1493 14 US-10-201-321-113 Sequence 113, .9 1493 14 US-10-201-322-113 Sequence 113,	.9 1493 14 US-10-201-326-113 Sequence 113, .9 1493 14 US-10-201-532-113 Sequence 113,	.9 1493 14 US-10-201-533-113 Sequence 113, .9 1493 14 US-10-201-535-113 Sequence 113,	.9 1493 14 US-10-201-769-113 Sequence 113, .9 1493 14 US-10-201-771-113 Sequence 113,	.9 1493 14 US-10-201-854-113 Sequence 113, .9 1493 14 US-10-202-410-113 Sequence 113,	.9 1493 14 US-10-202-473-113 Sequence 113, .9 1493 14 US-10-187-755-113 Sequence 113,		ALIGNMENTS	01	; Sequence 440, Application US/09738973 ; Patent No. US20020110563A1	WATION: Reed, Steven G.	Jenderson, Robert A.	Fling, Steven P. Wohamath, Raodoh	Algate, Paul A. Secrist, Heather	Indirias, Carol Yoseph Jenson, Darin R.	Slliot, Mark Annion, Jane		anlion: The Therapy and Diagnosis of Lung Cancer OE: 210121,475C9	ICATION NUMBER: US/09/738,973 NG DATE: 2000-12-14	2 ID NOS: 587 astSEQ for Windows Version 3.0		Homo sapiens		100.0%; Score 2239; DB 10; Length 2239; nilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	968 21 969 21 970 21																		RESULT 1 US-09-738-973-440	; Sequence 440 ; Patent No. U	; GENERAL INFO ; APPLICANT:	, APPLICANT: , APPLICANT:	; APPLICANT:	; APPLICANT: ; APPLICANT:	; APPLICANT: ; APPLICANT:	; APPLICANT:	; APPLICANT: ; TITLE OF IN	FILE REFERE	; CURRENT APP.	; NUMBER OF SEQ ID ; SOFTWARE: FastS	; SEQ ID NO 44 ; LENGIH; 22:	TYPE: DNZ ORGANISM:	97	Query Match Best Local Similarity Matches 2239; Conser

8 8 8 8 8 8

qq

g &

6 6 6 6 6 6 6 6 6

ò

g &

```
2161 AAAAAAAGCATACATCATGATTATAGGCAAAGAGGAGAGAAGGTAGATGTTCTTAAATT 2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361 ACTITACTGAGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTTTTCAGGAAGAGGCCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGGAAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 AGGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGGACGCCTTTTCAGGAAGAAGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTTTTCAGGAGGACGCCTTTTCAGGAAGAGAGAAAGTGCAGCTGAAGAGGAAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481 GTGTGTGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGAGGTTGGAGTGAGGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421 TCTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCCATGTCTCTGACCATCTGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541 AAGAAATCTGGAGGTCATTACACATATATTGGAAGTCTTTGGTCCATTACCAGCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTITACTGAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCCATGTCTCTGACCATCTGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGTGTGGGGGTCCTGTCACTATTTGGAGCTTTGTCTTATGCTGAATTGGGAACAACTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 2239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGGTTGAAGTGAGCAGAGATCATGCCAGCCTGGGTGACAGTGAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AND DIAGNOSIS OF LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
100.0%; Score 2239;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2239; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lodes, Michael J.
APPLICANT: Mohamath, Racdoh
APPLICANT: Mohamath, Rocdoh
APPLICANT: Henderson, Robert A.
APPLICANT: Benson, Darin R.
TITLE OF INVENTION: COMPOSITIONS AND METHODS
TITLE OF INVENTION: THE THERAPY AND DIAGNOS
FILE REFERRNCE: 210121.475C10
CURRENT APPLICATION NUMBER: US/09/854,133
CURRENT FILING: DATE: 2001-05-11
NUMBER OF SEQ ID NOS: 735
SOFTWARE: PASTSEQ for Windows Version 3.0
SED ID NO 440
LENGTH: 2239
                                                                                                                                                                                                                                                                                                    Sequence 440, Application US/09854133
Publication No. US20020183499A1
GENERAL INFORMATION:
                                                                                        2221 TATTAAAAAAAAAAAA 2239
                                                                                                                                 2221 TATTAAAAAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
CRGANISM: Homo sapiens
US-09-854-133-440
                                                                                                                                                                                                                                         RESULT 2
US-09-854-133-440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                     ò
                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2160
                                                              1140
                                                                                                                          1200
                                                                                                                                                                                                                                                                                                                                                                1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CIGITICAL CONSCIPILITATION CONTRACTION TO THE FINANCIAL SECTION OF THE SECTION OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCGGACCCATTTACTACAGGGATTGGCTTCGTCATCACTCGAGTCCCTGCGTAT 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2161 AAAAAAGCATACATCATGATTATGGCAAAGAGGAGAGAAGGTAGAGCTGTTCTTAAATT 2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGAC 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCA 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGGGCTGATTTATCTTCGATACAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCA 1500
                                                                                                                                                                                                                                                                        CTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTGTCTCCCAGGTTATTCTATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATCTCTTTATTATTATAGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCAGAACATTACAAATAATAATACTGGAAGTTGTACCAGAAGAAGAAGATAAGTTATGAATTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACCTATTGGGGTTAGGAGAAAAAGACTAGACAATTACTATGTGGTCATTCTCTACAACAT
                                                                                                                                                          1141 GTGACCTTTTCTGAGCGGCTACTGGGAAATTTCTCATTAGCAGTTCCGATCTTGTTGTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTCTGAAAGGACTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGTTAGCACGGCAAAGAACCTTCAAATTGAAGACTGAGATTTTTCTGTATATATGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGTAAAGATGGTTTTACACACTACAGATGTCTATACTGTGAAAAGTGTTTTCAATTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  credacacretririgaariricereagririrgeeagregerririrarreggeregeeagri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAAGTTATGAACTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGACTTGAGATCTTGGCAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGACTTGAGATCTTGGCAATCTGCCCAAGGGGAGACACAAAATAGGGGATTTTTACTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITCTGAAAGTCTAGAGAATTACAACTTTGGTGATAAACAAAAGGAGTCAGTTATTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCATATATTTTAGCATATTCGAACTAATTTCTAAGAAATTTAGTTATAACTCTATGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ricarararrirageararregaacraarricraagaaarriragriaraacrerargiag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACCTATTGGGGTTAGGAGAAAAGACTAGACAATTACTATGTGGTCATTCTCTACAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGTTAGCACGCAAAGAACCTTCAAATTGAAGACTGAGATTTTTCTGTATATATGGGTT
                                                        AATGTGGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGTTCAAATGCAGTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                   GCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTCTACCAGCTGTTATTGTTTTTGCACCCTTTGACAATGATAATGCTCTTCTCTGGAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCGACAGICITITGAATTICCTCAGITTIGCCAGGIGGCTTTITIATTGGGCTGGCAGIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CIGITCATCCCAGCITIGITITCCTTCACATGCCTCTTCATGGTTGCCCTTTCCCTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOGGACCCATTTAGTACAGGGATTGGCTTCGTCATCACTCTGACTGGAGTCCCTGCGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATCTCTTTATTATATGGGACAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC
                                                                                                                                                                                                                                            CTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTGTGTCTCCAGGTTATTCTATGTT
                                                                                                                                                                                                                                                                                                                                                             GCGTCTCGAGAGGGTCACCTTCCAGAAATCCTCTCCAGATTCATGTCCGCAAGCACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1921
                                                                                                                                                                                                                                                                                                 1201
                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2101
                                                        1081
                                                                                                                       1141
                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2041
   1081
```

Db

δ

QV dd

g

g

92 92 93 g

S S S

ò

ò

8 6 8 6 8 6 8 6 8 6 8

090   1681 ACCAGAACATACAAATAATACTGGAAGTTGTACCAGAAGAAGTAAGT	PD
ATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTT  ATCTGGAGGTGGAACTCCTCATATATTTTGGAAGTCTTTGCTGCTGTGTGATATCCCTG  AGGACGTGGAACTCCTCATATTTTTTTTTT	

92 & 92 12 & 93

	1201 CTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTTGCTCTCCCAGGTTATTCTATGTT 1260	1261 GCGTCTCGAGAGGCTCACTTCCAGAAATCCTCCCATGATTCATGTCCGCAAGCACACT 1320 	1321 CCTCTACCAGCTGTTATTGTTTTGCACCCTTTGACAATGATGATCTCTTCTGGAGAC 1380 	1381 CTCGACAGTCTTTGAATTTCCTCAGTTTTGCCAGGTGGCTTTTATTGGGCTGGCAGTT 1440	1441 GCTGGGCTGATTTATCTTCGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCA 1500 	1501 CIGITCATCCCAGCITIGITICCTTCA CAIGCCTCTTCAIGGITGCCCTTTCCCTCTAI 1560 	1561 TCGGACCCATTTAGTACAGGATTGGCTTCGTCATCACTCGACTGGAGTCCCTGCGTAT 1620 [	1621 TATCTCTTTATTATATGGGCAAGAAACCCAGGTGGTTTAGAATAATGTCAGAGAAAATA 1680 	1681 ACCAGAACATTACAAATAATACTGGAAGTTGTACCAGAAGAAGATAGGTTATGAACTAAT 1740 	1741 GGACTTGAGATCTTGGGAATCTGCCCAAGGGGAGACACAAAATAGGGATTTTTACTTCAT 1800 	1801 TITCIGAAAGICIAGAGAAITACAACITIGGIGAIAAACAAAAGGAGICAGITAITITIA 1860 	1861 TICATATATITTAGCATATICGAACTAATTICTAAGAAATTIAGTTATAACTCTATGTAG 1920 	1921 TTATAGAAAGTGAATATGCAGTTATTCTATGAGTCGCACAATTCTTGAGTCTCTGATACC 1980 	1981 TACCTATTGGGGTTAGGAGAAAAGACTAGACAATTACTATGTGGTCATTCTCTACAACAT 2040 	2041 AIGITAGCACGGCAAAGAACCTTCAAATIGAAGACTGAGATTTTTCTGTATATATGGGTT 2100 	2101 TIGIAAAGAIGGITTIACACACIACAGAIGICIAIACIGAAAAGIGITITICAATICIG 2160 	2161 AAAAAAAGCATACATCATGATTATGGCAAAGGGGGAGAAGGTAGGGGGGGTGTTT 2220 	2221 TATTAAAAAAAAAAAA 2239 
<b>4</b> 0	. γς α <sub>δ</sub>	& &	<i>ò</i> €	& 8 8	% <sup>6</sup> 2	& €	₹ Q Q	& g	S G	yy da	Sy G	& 8 ———	Sy Sy	yy dd	<b>상</b> 옵	<b>상</b> 옵	S S	<i></i> ∂∂
61 AGAATTAAGGAAAAAAAGAAAGAAAAAGGAAAAGAAATTCCAGGCCAATTGTGG 120 	121 CATAGATTTTATCATATTCTGGATTTTTTTGGATTCTTTTGTTTTCTCATCACTGGATTCA 180	GGAAAGCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAATGTTAACGGGGAAAGCTGTAACGGGGAAAGCTGACAACTTCCAACCACCATCTCCAACATTAACTGCAAGAAAAAGCTGAAAAGCTAAAAGCTGAAAAGAAAAAAGCTGAAAAAAAA	AGCTGCCTTCCCTGGGCAACAAGAGCCCCCTGGGCAGGACGCCTTTTCAGGAAGAACAAAAAAAA	GCCTTTTCAGGAAGAGACGCCTTTTCAGGAAGAGAAAGTGCAGCTGAAGAGAAAGTC	GAGGGGAGTCTCCATTATCATTGGCACCATCATTGGAGCAGGAATCTTCATC AAGGGGAGGAGTTATCATTGGCACCATCATTGGAGCACAATCATTGATTATCATTGGACACATCATTGATTATCATTGGACACATCATTGATTATCATTGATTG	21 TCTCCTAAGGGCGTGCTCCAGAACACGGGCAGCGTGGGCATGTCTCTGACCATCTGGACG	4 — 4 4 — 4	541 AAGAAATCTGGAGGTCATTACACATATATTTTGGAAGTCTTTGGTCCATTACCAGCTTTT 541 AAGAAATCTGGAGGTCATTACACAAATTTTTGGAAGTCTTTTGGTCCATTACCAGCTTTTTTTT	GTACGAGTCTGGGTGGAACTCCTCATAATACGCCCTGCCGCTACTGCTGGTGATATCCCTG	50 	A TCAAGCTCATTACAGCTGTGGGCATAACTGTAGTGATGGTCCTAAATAGCATGAGTGTCTC		ATTAINGTCCCTGGAGTTATGCAGCTAATTAAAGGTCAAACGCAGAACTTTAAAGACGCC		4 – 4	ACCATTCCCCTTGCAATATGTATATCCATGGCCATTGTCACCATTGGCTATGTGCTGACA	AATGTGGCCTACTTTACGACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCA	4 ~4

1113 1057 1173

997

1233

1177

1413

1357 1473 1417 1533 1477 1593 1537 1653 1597 1713 1657 1773 1777 1893 1837

1297

1237

```
1658 CCAGAAGAAAGATAATGAACTAATGGACTTGAGATCTTGGCAATCTGCCCAAGGGGA 1717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACACAAAATAGGGATTTTTACTTCATTTTCTGAAAGTCTAGAGAATTACAACTTTGGTG 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1894 AAGAAATITAGTIAIAACICTAIGIAGITAIAGAAAGIGAATAIGCAGITATICTAIGAG 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1954 TCGCACAATTCTTGAGTCTCTGATACCTACTATTGGGGGTTAGGAGAAAAGACTAGACAA 2013
           GGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG
                                                                            998 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG
                                                                                                                                                                                                                                                                                                                                                                 818 GGTCAAACGCAGAACTITAAAGACGCCTITICAGGAAGAGATTCAAGTATTACGCGGTTG
                                                                                                                ccachescririnarianesaarenarecararecrescrissrrraccreaacrirerr
                                                                                                                                                                            ACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC
                                                                                                                                                                                                                                                                                                                  GAGCTGCTGCTTCAAATGCAGTGGCAGTGACCTTTTCTGAGGGGCTACTGGGAAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATGATTCATGTCCGCAAGCACACTCTCTACCAGCTGTTATTGTTTTGCACCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1054 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCCTACTTTACGACCATTAATGCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1354 ACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATATGCATCGTCCTTTCAAGGTGCCACTTCATCCCCAGCTTTGTTTTCCTTCACATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCACTCTGACTGGAGTCCCTGCGTATTATCTTTTTTATATGGGACAAGAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1538 ATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTTATTATATGGGACAAGAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1598 IGGITIAGAATAATGICAGAGAAAATAACCAGAACAITACAAATAATAATGAAGITGIA
                                                                                                                                                                                                                                                                                              GAGCTGCTGTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITGCTGTCTCCAGGTTATTCTATGTTGCTCTCCAGAGGGTCACCTTCCAGAAATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1414 AGGTGGCTTTTTTTTGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGTTTAGAATAATGTCAGAGAAAATAACCAGAACATTACAAATAATACTGGAAGTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1838 AAGAAATTTAGTTATAACTCTATGTAGTTATAGAAAGTGAATATGCAGTTATTCTATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAGAAGAAGATAAGTTATGAACTAATGGACTTGAGATCTTGGCAATCTGCCCAAGGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1718 GACACAAATAGGGATTTTTACTTCATTTTCTGAAAGTCTAGAGAATTACAACTTTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1834 ATAAACAAAAGGAGTCAGTTATTTTATTCATATTTTAGCATATTCGAACTAATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1058
                                                                                                                                                                                                                                                                                                                                                                   1174
                                                                                                                                                                                                                                                                                                                                                                                                                                        1234
                                                                              934
                                                                                                                878
                                                                                                                                                                                       938
                                                                                                                                                                                                                                                                                                1114
                                                                                                                                                                                                                                                                                                                                                                                                      1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1774
         874
                                     Пb
                                                                                                        g
                                                                          à
                                                                                                                                                à
                                                                                                                                                                                   g
                                                                                                                                                                                                                     \dot{\delta}
                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                            \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGGCATGTCTCTGACCATCTGGACGTGTGTGGGCTCCTGTCACTATTTGGAGGTTTG 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT 637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GIGATGGICCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC 813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 334 GAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCATCATTGGAGGAATCTTCATCTCTTCTAAGGGGGGTGCTCCAGAACAGGGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGGCATGTCTCTGACCATCTGGACGGTGTGTGGGGGTCCTGTCACTATTTGGAGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTGTGGGAACTCCTCATAATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCGTAATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                 APPLICANT: Honderson, Robert A.
APPLICANT: Honderson, Robert A.
APPLICANT: Filing, Steven P.
APPLICANT: Filing, Steven P.
APPLICANT: Algare, Paul A.
APPLICANT: Secrist, Heather
APPLICANT: Secrist, Heather
APPLICANT: Bersie, Heather
APPLICANT: Berson, Darin R.
APPLICANT: Bliot, Mark
APPLICANT: Mannion, Jane
APPLICANT: SERENCE SERENCE SERO
CURRENT FILING DATE: 2000-12-14
NUMBER OF SEQ ID NOS: 587
SOFTWARE: FastSEQ for Windows Version 3.0
SEROTIN NO 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.4%; Score 1867; DB 10;
100.0%; Pred. No. 0;
live 0; Mismatches 0;
                                                                                    Sequence 441, Application US/09738973
Patent No. US20020110563A1
GENERAL INFORMATION:
APPLICANT: Reed, Steven G.
2221 TATTAAAAAAAAAAAA 2239
                                                                                                                                      Reed, Steven G.
Henderson, Robert A.
Lodes, Michael J.
Fling, Steven P.
Mohamath, Raodoh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 1867; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
US-09-738-973-441
                                                  RESULT 4
US-09-738-973-441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $ a
```

ò g ò QQ  $\overset{\circ}{\nabla}$ ద  $\delta$ g b S ò d

원 Š

638 ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA	QY 754 GIGATIGGICCIAAATAGCAIGAGIGTCAGCICGGAGCGCCCGGATCCAGATTTTCTTAACC 81:	Qy 814 TTTTGCAAGCTCACAGCAATTCTGATAATTATAGCTCCTGGAGTTATGCAGCTAATTAAA 873  Db 758 TTTTGCAAGCTCACAGCAATTCTGATAATTATAAGCCCTGGAGTTATGCAGCTAATTAAA 817	OY 874 GGTCAAACGCAGAACTITAAAGACGCCTTTTCAGGAAGAGAITCAAGTATTACGCGGTIG 9	OY 934 CCACHGGTTTTATTATGAANGTATGCATATGCTGGCTGGTTTTACCTCAACTTTGTT 9	Qy 994 ACTGAAGAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1	Qy 1054 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 1113  Db 998 ATTGTCACCATTGGCTATGTGACAAATGTGGCCTACTTACGACCATTAATGCTGAG 1057	Qy 1114 GAGCTGCTGCTGTAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC 1173	Qy 1174 TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTG 1233	QY 1234 TITGCTGTCTCCAGGTTAITCTAIGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC 1  Db 1178 TITGCTGTCTCCAGGTTAITCTAIGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC 1	0y 1294 TCCATGATTCATGCGCAAGCACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTG 1353	0y 1354 ACAAHGATAARGCTCTFCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC 1413  Db 1298 ACAATGATAATGCTCTFCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTFTGCC 1357	OY 1414 AGGIGGCITTIAITGGGCAGAGGCTGGTGGTGGTGATTAICTTCGATACAAATGCCCA 1473	Qy         1474 GATATCCATCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTCTTT	Qy 1534 CICTTCARGGIRGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC 1593	OY 1594 ATCACTCTGACTGGAGTCCCTGCGTATTATCTTTTATTATGGACAAGAAACCCAGG 1653	Oy 1654 IGGITIAGAAIAAIGCCAGAGAAAAIAACCAGAACAIIACAAAIAAIACIGGAAGTIGIA 1713	Oy 1714 CCAGAAGAAGATAAGAACTAATGGACTTGAGACTTGGGATCTTGGCATCTGCCCAAGGGGA 1773	
	2014 TTACTATGTGGTCATTCTACAACATATGTTAGCACGGCAAAGAACCTTCAAATTGAAG 2073 	ACTGAGATTTTTCTGTATATGGGTTTTGTAAAGATGGTTTTACACACTACAGATGTCT	ATACTGGGATTTTCAATTCTGAAAAAAGGATACATCATGATTATGGGAAAGG 2	GAGAGAA 2200		Operation No. US20020183499Al Publication No. US20020183499Al	APPLICANT: Honderson, Albart A. APPLICANT: Henderson, Robert A. APPLICANT: Benson, Darin R.	AFFLICANT: SECTIFG, HEAGENER TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER FIRE REFERENCE: 210121, 475010	CURRENT FILING DATE: 2001-05-11 NUMBER OF SEQ ID NOS: 735 SOFTWARE: FastSEQ for Windows Version 3.0	LENGTH: 5981 TYPE: DNA OGANIZH: Homo sapiens	83.4%; Score 1867; DB 10; Length 5981; Similarity 100.0%; Pred. No. 0; 7. Concernsive of Mismathon of Indole of	AGCTGAAGAGAAAGTCACTTTACTGAGGGAGTCTCCATTATCATTGGC 39	ACCATCATTGGAGCAGGAATCTTCATCTCCTTAAGGGCGTGCTCCAGAACACGGGCAGC 45	GIGGGGATGTCTCTGACCATCTGGACGGTGTGTGGGGGCCCTGTCACTATTTGGAGCTTTG 51	TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATTTTG 57  TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTTG 57  TCTTATGCTGAATTGGGAACAACTATAAAAGAAATTTGGAGGTCATTACAAAATTTTG 57	GAAGICTITGGICCATTACCAGCTITTGTACGGGTCTGGGTGGAACTCCTCATAATACGC 63		CCIGCAGCIACIGCIGIGAIAICCCIGGCAIIIGGACGCIACAIICIGGAACCAIIIIII 63

574 GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTGATAATACGC 633 	634 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTT 693 	694 ATTCAATGTGAAATCCCTGAACTTGCGATCAAGGTCATTACAGCTGTGGGCATAACTGTA 753 	754 GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC 813 	814 ITITGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA 873 	874 GGTCAAACGCAGAACTITAAAGACGCCTITTCAGGAAGAGATTCAAGTATTACGCGGTTG 933 	e e	994 ACTGAAGAAGTAGAAAACCCTGAAAAAACCCTTCCCCTTGCAATATGTATATCCATGGCC 1053 	11	H H	1174 TCAITAGCAGTICCGAICTITGTIGCCCTCTCCTGCTITIGGCTCCATGAACGGTGGTGTG 1233	1234 ITTGCTGTCCCAGGTTATTCTATGTTGCGTCTCGAGAGGTCACCTTCCAGAAATCCTC 1293	1294 TCCATGAITCAIGTCGCAAGCACACTCCTCTACCAGCTGITAITGTIITTGCACCCTITG 1353 	1354 ACAATGATAATGCTCTTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC 1413	1414 AGGIGGCITITTATICGGCTGGCAGTIGCTGGCTGATTTATCTTCGATACAAAIGCCCA 1473 	1474 GAIAIGCAICGITCTITICAAGGIGCCACIGITICATCCCAGCTITIGITITICCTICACAIGC 1533	1534 CICITCAIGGCITICCCICTAITCGGACCCAITIAGIACAGGGAITGGCITCGIC 1593 1478 CICITCAIGGIIGCCITICCCICIAITCGGACCCAITIAGIAGGGAITGGCITCGIC 1537	1594 AICACTCTGAGTCCCTGCGTATTATCTCTTTATATATGGGACAAGAAACCCAGG 1653
<i>₹</i> 8	Qy Db	B &	9 Q	දිර යි	Qy Dp	QY Db	QV Dp	Qy	Qy du	Qy	Š 8	Š da	65 Ch	B &	SP SS	8 S	8 B 8
OY 1834 ATAAACAAAAGGGGTCAGTTATTTTTTTTTTTTTTTGGGGTATTCGAACTAATTTCT 1893	0 0 0	AGACAA 20	FTGAAG 20	ATGTCT 213	219	1	RESULT 6 US-10-144-649A-441	<pre>// Sequence 441, Application US/10144649A // Publication No. Us20030118599A1 // GENERAL INFORMATION: // APPLICANT: Lodes, Michael J.</pre>	; APPLICANT: Wang, Tongtong ; APPLICANT: Fan, Liqun ; APPLICANT: Algate, Paul A. ; APPLICANT: McNeill, Patricia D.	; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ; TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER ; FILE REFERENCE: 210121.475C11 ; CURRENT APPLICATION NUMBER: US/10/144,649A	; CURRENT FILING DATE: 2002-08-21 ; NUMBER OF SEQ ID NOS: 749 ; SEQ ID NO 441	; ISNGTH: 5981 ; TYPE: DNA ; ; ORGANISM: Homo sapiens US-10-144-649A-441	Query Match 83.4%; Score 1867; DB 14; Length 5981; Best Local Similarity 100.0%; Pred. No. 0; Matches 1867; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	AGAGGAAAGTCACTTACTGAGGGAGTCTCCATTATCATTGC 39	GCAGC 45	CTTTG 5	TTTTG 5

432 ACCATCATTGGAGCAGGAATCTTCATCTCTCTAAGGGCGTGCTCCAGAACACGGGCAGC 491	454 GIGGGCAIGICICIGACCAICIGGACGGIGIGGGGGICCIGICACIAITHGGAGCITIG 513	514 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG 573	574 GAAGTCTTTGGTCCALTACCAGCTTTTGTACGAGTCTGGGTAGGTACTCCTCATAATACGC 633 [1	634 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTT 693 [	694 AITCAAIGIGAAAICCCIGAACIIGCGAICAAGGICAIIACAGGIGGGGGGGAIAACIGIA 753 	754 GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC 813	814 TITIGCAAGCICACAGCAATICTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA 873 	874 GGTCAAACGCAGAACTTTAAAGACGCCTTTTCACGAAGAGATTCAAGTATTACGCGGTTG 933 	934 CCACTGGCTTTTATTATGGAATGTATGCATATGCTGGCTG	994 ACTGAAGAAGTÂGAAAACCCTGAAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1053 1032 ACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1091	1054 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 1113 1092 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 1151	11	1174 TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTG 1233	Η Η	1294 TCCATGATTCATGTCGGCAAGCACTCCTCTACCAGCTGTTATGTTTTGCACCCTTTG 1353	1354 ACAARGATAATGCTCTTCTGGAGACCTGGACACGTCTTTTGAATTTCCTCAGTTTTGCC 1413	1414 AGGIGGCITITIAITGGGCTGGCAGTIGCTGGGCTGALTTATCTTCGATACAAATGCCCA 1473	1474 GATATGCATCGTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGC 1533 
qq	රු පු	8 %	å a	Sy B	P Q	Oy DP	oy B	oy Oy	ζζ	oy B	QY Db	Qy Db	å a	λ O	QV Dp	g g	<i>장</i> 점	oy Oy
									777.									
Db 1598 TGGTTTAGAATAATGTCAGAGAAAATAACCAGAACATTACAAATAATACTGGAAGTTGTA 1657	GGGA 17	TGGTG 183	ATAAACAAAAGGAGTCAGTTATTTTATTCATATTTTTAGCATATTCGAACTAATTTCT 189	ATGAG 195	GACAA 201:	20	TGTCT 213	219			Sequence 740, Application US/10144649A; Sequence 740, Application No. US20030118599A1 ; Publication No. US20030118599A1 ; GENERAL INPORMATION:	AFFLICANT: Wang, Tongtong  APPLICANT: Wang, Tongtong  APPLICANT: Fan, Liqun  APPLICANT: Paul Ball A.  APPLICANT: Model Ball A.	TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER FILE SPERENCE: 210121.475011 CIDEDAM ADDITION OF METHOD 101.475011	CURRENT FILING DATE: 2002-08-21  NUMBER OF SEQ ID NOS: 749  SOFTWARE: FastSEQ for Windows Version 3.0  SRO ID NO 340	;	83.4%; Score 1867; DB 14; Length 6080; rrity 100.0%; Pred. No. 0; nnservative 0: Mismarches 0: Tadels 0.	CAGCTGAAGGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC 39	394 ACCATCATTGGAGCAGGAATCTTCATCTCTCTCTAAGGGCGTGCTCCAGAACACGGGGCGGC

0 1065 1113 1005 1293 1053 1173 1233 393 165 453 225 513 285 573 345 633 405 465 525 813 585 693 753 873 645 933 705 993 765 825 882 945 ACCATCATTGGAGCAGGAATCTTCATCTCCTAAGGGGGTGCTCCAGAACACGGGCAGC GTGGGCATGTCTCTGACCATCTGGACGGTGTGGGGTCCTGTCATTTGGAGCTTTG TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTTG 106 GAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC 394 ACCATCATTGGAGCAGGAATCTTCATCTCCTAAGGGCGTGCTCCAGAACACGGGCAGC GTGGGCATGTCTGACCATCTGGACGGTGTGGGGGTCCTGTCACTATTTGGAGCTTTG TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATTTTG GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC TTTTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA CCTGCAGCTACTGCTGTATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT ccrecaecracrerearareccreecarrregaececracarreregaaecearrrrrr 694 ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA GGTCAAACGCAGAACTTTAAAAGACGCCTTTTCAAGAAGAGATTCAAGTATTACGCGGTTG GGTCAAACGCAGAACTTTAAAGACGCGTTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG 994 ACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG GAGCTGCTGCTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGTGTG TTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC 334 GAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC CCACTGGCTTTTTATGGAATGTATGCATATGCTGGCTGGTTTTACCTCAACTTTGTT 1054 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG GAGCTGCTTCCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC TCATTAGCAGTICCGAICTITGITGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTG Gaps . (0 Length 3144; Indels 1;

; CURRENT APPLICATION NUMBER: US/10/163,866 ; CURRENT FILING DATE: 2002-06-05 ; PRIOR APPLICATION NUMBER: US 60/296,076 ; PRIOR FILING DATE: 2001-06-05 ; PRIOR FILING DATE: 2001-06-05 ; PRIOR FILING DATE: 2001-10-10 ; PRIOR FILING DATE: 2001-10-10 ; PRIOR FILING DATE: 2001-10-22 ; PRIOR PILING DATE: 2001-10-24 ; PRIOR APPLICATION NUMBER: US 60/357,253 ; PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR PILING DATE: 2002-02-15 ; PRIOR PILING DATE: 2002-02-15 ; PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR PILING DATE: 2002-02-15 ; TILING DATE: 2002-02-15 ; PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR PILING DATE: 2002-02-15 ; TILING DATE: 2002-02-15 ; PRIOR PILING DATE: 2002-02-15 ; ROFTWARE: PARENTIN VETSION 3.1 ; SEQ ID NO 29 ; LENGTH: 2482 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-163-866-29	Query Match Best Local S Matches 1772 334	Qy         394 ACCATCAITGGAGCAGGAATCTTCAICCTAAGGGCGTGCTCCCAGAACACGGGCAGC 453           Db         197 ACCATCAITGGAGCAGGAATCTTCATCTCTCCTAAGGGCGTGCTCCAGAACACGGGCAGC 456           Qy         454 GTGGGCATGTCTCTGACCATCTGGACGTGTGTGGGGCTCCTGTCATTTGGAGCTTTG 513           Db         457 GTGGGCATGTCTCTGACCATCTGGACGTGTGTGGGGGTCCTGTCATTTGGAGCTTTG 513	Qy         514 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG 573           Db         517 TCTTATGCTGAATTGGGAACAACTATAAAAAATCTGGAGGTCATTACACATATATTTTG 576           Qy         574 GAAGTCTTTGGTCCATTACACAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC 633           Db         577 GAAGTCTTTGGTCCATTACAGCTTTTGTACGGGTGGGAACTCCTCATAATACGC 636	Qy         634 CCTGCAGCTACTGCTGTGATATCCTGGCATTTGGACGCTACATTTTTT 693           Db         637 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT 696           Qy         694 ATTCAATGTGAAATCCCTGAACTTGCGATCACTACAGCTGTGGGCATAACTGTA 753           Db         697 ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA 756	Qy         754 GTGATGGTCCTAAATAGCATGAGTGCTGGAGCGCCCGGATCCAGATTTTCTTAACC 813	817 TTTTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA 874 GGTCAAAGGCGAGATTAAAAGACGCTTTTCAGGAAGATTCAAGAATTCAGGAAGTTCAAGGATTCAAGGATTCAAGGATTCAAGGATTGAGGGTTGGTT	QY 934 CCACTGGCTTTTATTATGGAATGTATGCTATGCTGGCTGG
294   TCCATGATTCATGTCCGCAAGCACACTCCTACCAGCTGTTATTGTTTTGCACCCTTTG   1353	1594 ATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTTATTATGGGACAAGAAACCCAGG 1366 ATCACTCTGACTGGAGTCCCTGCGTATTATCTTTATTATTATGGGACAAGAAACCCAGG 1654 TGGTTTAGAATAATGTCAGAGAAATAACCAGAAACTTACAAATAATATGGGACAAGAAACCAGG 1654 TGGTTTAGAATAATGTCAGAGAAATAACCAGAACATTACAAATAATACTGGAAGTTGTA 1426 TGGTTTAGAATAATGTCAGAGAAATAACCAGAACATTACAAATAATACTGGAAGTTGTA	OY 1714 CCAGAAGATAAGTTATGAACTAATGGACTTGAGATCTTGGCCAATCTGCCCAAGGGGA 1773	Qy 1834 ATADACAAAGGACTCAGTTATTTATTCATATTTTAGCATATTTCGAACTAATTTCT 1893	Oy 1954 TCGCACAATTCTTCAGTCTTCTGCTACCTACCTATTGGGGTAAGGAAAAGAACAA 2013	QY 2074 ACTGAGATITICGTATATATGGGTTTTGTAAAGATGGTTTTACACACTACAGATGTCT 2133	Db 1906 ATACTGTGAAAAGTGTTTTCAATTCTGAAAAAGCATACATGATTATGGCAAAGAG 1965 Qy 2194 GAGAGAA 2200 Db 1966 GAGAGA 1972	RESULT 9 US-10-163-866-29 ; Sequence 29, Application US/10163866 ; Publication No. US20030027188A1 ; GENERAL INFORMATION: ; APPLICANT: EXELIXIS, INC. ; TITLE OF INVENTION: SLC75 AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE ; FILE REFERENCE: EX02-080C

1114 GACTOCTOCTOCTOCTOCTOCTOCTOCTOCTOCTOCTOCTOC	US-10-133-013-40 ; Sequence 40, Application US/10133013	; Publication No. US20030166903A1 ; GENERAL INFORMATION: ; APPLICANT: Astromoff, Anna ; APPLICANT: Bandman, Olga	; APPLICANT: Cocks, Benjamin G. ; TITLE OF INVENTION: GENES ASSOCIATED WITH VASCULAR DISEASE ; FILE REFERENCE: PA-0049 US ; CURRENT APPLICATION NUMBER: US/10/133,013	; CTRRENT FILING DATE: 2002-04-25 ; PRIOR PAPLICATION NUMBER: 60/287,067 ; PRIOR FILING DATE: 2001-04-27 ; NUMBER OF SEQ ID NOS: 271	; SOFTWARE: PERL Program ; SEQ ID NO 40 ; LENGTH: 2041 ; TYPE: DNA	) ORGANISM: Homo sapiens ; FEATURE: ; NAME/KEY: misc feature ; OTHER INFORMATION: Incyte ID No. US20030166903A1 406992.1	; FEATURE: ; LOCATION: 1923, 1998, 2026 ; OTHER INFORMATION: a, t, c, g, or other	-10-133-013-40 Duery Match Sest Local Similarity 99.9%; Pred. No. 0;	Matches 1650; Conservative 0; Mismatches 1; Indels 0; Gaps 334 GAGAAAGTGCAAGAAAGAAAGAAAGTCACTTTACTGAAGGAAATTCATTGGC	394	407 454	467 514	527 T 574 G 	587	Db 647 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTT 706  Qy 694 AITCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA 753	Db 707 AFTCAATGTGAAATCCTGAACTTGCGATCAATGTGTTTTTTTT	Db 767 GTGATGCTCCTAAATAGCATGATGTCTGGGGGGGGGGGG	827 TITIGGAAGCICACAGCAAITCIGAIAAITAIAGICCCIGGAGIIAITGCAGCTAAIIAAA	QY         874 GGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG         933	
· · · · · · · · · · · · · · · · · · ·		GAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTCGAGCTGCTGCTACTGGGAAATTTCGAGCTGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC	TCATTAGCAGTICCGAICTITGTIGCCCTCTCCTGCTTTIGGCTCCATGAACGGTGGTGTGTG	TTTGCTGTCTCCAGGITATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC	TCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTG 135	ACAATGATAATGCTCTTCTCGGAGACCTCGACAGTCTTTGGATTTCCTCAGTTTTGCC 141	AGGIGGCITITATIGGGCIGGCAGTIGCIGGGCIGATITATCITCGAIACAAAIGCCCA 1	GATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGC 1	CTCTTCATGGITGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC	ATCACTCTGACTGGGGTCCCTGCGTATTATCTCTTTATTATGGGACAAGAACCCAGG	4 TGGTTTAGAATAATGTCAGAGAAATAACCAGAACATTAGAAATAATACTGGAAGTTGTA	CCAGAAGAAAATAAGAACTAATGGACTTGAGATCTTGGCAATCTGCCCAAGGGGA 	GACACAAAATTAGGGATTTTTACTTCATTTTCTGAAAGTCTAGAGAATTACAACTTTGGTG	ATAAACAAAAGGAGTCAGTTATTTTTATTCATATATTTTAGCATATTCGAACTAATTTCT	aagaaatttagttataactctatgtagttatagaaagtgaatatgcagttattctatgag 	TCGCACAATTCTTGAGTCTCTGATACCTATTGGGGGTTAGGAGAAAAGACTAGACAA 	TTACTATGTGGTCATTCTCTACAACATATGTTAGCACGGCAAAGAACCTTCAAATTGAAG	TTACTATGTGGTCATTCTCTACAACATATGTTAGCACGGCAAAGAACCTTCAAATTGAAG ACTGAGATTTTTCTGTATATATGGTTTTGTAA 2106		

```
ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             887 GGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      347 GAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGGGGTCTCCATTATCATTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     527 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               767 GIGAIGGICCIAAATAGCAIGAGIGAGIGAGCGCCCGGGAICCAGAITIICIIIII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   827 ITITIGCAAGCICACAAGTAATTATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    874 GGTCAAACGCAGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334 GAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             394 ACCATCATTGGAGCAGGAATCTTCATCTCCTAAGGGCGTGCTCCAGAACACGGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GIGGGCATGTCTCTGACCATCTGGACGGTGTGGGGGTCCTGTCACTATTTGGAGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   467 GTGGGCATGTCTCTGACCATCTGGACGGTGTGGGGGTCCTGTCACTATTTGGAGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGTCTTTGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               587 GAAGICITIGGICCATIACCAGCITITGIACGAGICTGGGIGGAACTCCTCATAATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        694 ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCCGGATCCAGATTTTCTTAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        US20030194721A1 406992.1
                                                                                                                                                                      FOAM CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 12;
                Sequence 78, Application US/10247671

Publication No. US20030194721A1

GENERAL INFORMATION:
APPLICANT: Mikita, Thomas
APPLICANT: Mikita, Thomas
APPLICANT: Mikita, Thomas
APPLICANT: Mikita, Matthew R.
APPLICANT: Porter, Gordon, J.
APPLICANT: Porter, Gordon, J.
APPLICANT: PASET, Matthew R.
TITHE OF INVENTION: GENES EXPRESSED IN TREATED FORM;
TITHE OF INVENTION: GENES EXPRESSED IN TREATED FORM;
CURRENT APPLICATION NUMBER: US/10/247,671
CURRENT FILING DATE: 2002-09-18
PRIOR FILING DATE: 2001-09-19

NUMBER OF SEQ ID NOS: 186
SOFTWARE: PERL PROGRAM
SEQ ID NO 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71.5%; Score 1600; 99.9%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or other
                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No.
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: unsure
LOCATION: 1923, 1998, 2026
OTHER INFORMATION: a, t, c, g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 99.9
Matches 1650; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
      US-10-247-671-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-247-671-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           514
                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                  1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTTATTATGGGACAAGAAACCCAGG 1653
                                                                                                                                                                               ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 1126
                                                                                                                                                                                                                                                  GAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC 1186
                                                                                                                                                                                                                                                                                                           TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTTG 1233
                                                                                                                                                                                                                                                                                                                                                                                         TTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTG 1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rccardarrcardredecadecacacrecreraceacererrarrerrecacecrrre 1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAATGATAATGCTCTTCTCTGGAGACCTCGAGTCTTTTGAATTTCCTCAGTTTTGCC 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGIGGCITTITATIGGGCIGGCAGTIGCIGGGCTGATTTATCTTCGATACAAAIGCCCA 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAATGCCCA 1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CICITCAIGGITGCCCITTCCCTCTAITCGGACCCAITTAGTACAGGGAITGGCTTCGIC 1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IGGITITAGAATAAIGICAGAGAAAATAACCAGAACAITACAAAITAATACIGGAAGTIGIA 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAGAAGAAGATAAGTTATGAACTAATGGACTTGAGATCTTGGCAATCTGCCCAAGGGGA 1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACACAAAATAGGGATTTTTACTTCATTTTCTGAAAGTCTAGAGAATTACAACTTTGGTG 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACACAAAATAGGGATTTTTACTTCATTTTCTGAAAGTCTAGAGAATTACAACTTTGGTG 1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1847 ATABACAAAAGGAGTCAGTTATTTTTATTCATATTTTTAGCATATTCGAACTAATTTCT 1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGAAATTTAGTTATANCTCTATGTAGTTATAGAAAGTGAATATGCAGTTATTGTATGAG 1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGTTTAGAATAATGTCAGAGAAATAACCAGAACATTACAAATAATACTGGAAGTTGTA 1726
ACTGAAGAAGTAGAAAACCCTGAAAAAAACCATTGCCATTGCAATATGTATCCATGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                         TITGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAATGATAATGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGAAATTTAGTTATAACTCTATGTAGTTATAGAAAGTGAATATGCAGTTATTCTATGAG
                                                                                                                                             ATTIGTCACCATTIGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG
                                                                                                                                                                                                                             GAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAGAAGAAGATAAGTTATGAACTAATGGACTTGAGATCTTGGCAATCTGCCCAAGGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAAACAAAAGGAGTCAGTTATTTTTATTCATATATTTTAGCATATTCGAACTAATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCGCACAATTCTTGAGTCTCTGATACCTACC 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGCACAATTCTTGAGTCTCTGATACCTACC 1984
                                                                                                       1001
                                                                                                                                                                                                                                                                                                                                                                                                                             1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1547
                                                                                                                                             1054
                                                                                                                                                                                     1067
                                                                                                                                                                                                                             1114
                                                                                                                                                                                                                                                                   1127
                                                                                                                                                                                                                                                                                                                                                 1187
                                                                                                                                                                                                                                                                                                                                                                                         1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1967
                         947
                                                               994
                                                                                                                                                                                                                                                                                                         1174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1534
                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                    gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dd
                                                             \delta
                                                                                                   g
                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                           ò
                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
```

ô 393

Gaps

466

513 526 573 586

646 633

693 706 753 766 813 873 886

826

946

406 453

RESULT 11

S P S P S P S

do oy do

RESULT 12 US-10-163-866-30 i Sequence 30, Application US/10163866 i Publication No. US20030027188A1 i Publication No. US20030027188A1 i APPLICANT: EXELIXIS, INC. i TITLE OF INVENTION: SLC7S AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE CURRENT PILIANG DATE: 2002-06-05 i CURRENT PILIANG DATE: 2002-06-05 i PRIOR PELICATION NUMBER: US 60/296,076 i PRIOR PELICATION NUMBER: US 60/328,605 i PRIOR PELICATION NUMBER: US 60/338,733 i PRIOR FILING DATE: 2001-01-0 i PRIOR FILING DATE: 2001-02-2 i PRIOR FILING DATE: 2001-02-2 i PRIOR FILING DATE: 2002-02-15 i TYPE: PACH IN VERSION 3.1 i LEMOTH: 1861 i TYPE: DNA i ORGANISM: Homo sapiens uS-10-163-866-30	Query Match 64.9%; Score 1454; DB 14; Length 1861; Best Local Similarity 99.9%; Pred. No. 0; Matches 1504; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	QY         334         GAGARAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGAGTCTCCATTATCATTGGC         393           Db         341         GAGARAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGAGTCTCCATTATCATTGGC         400	QY         394 ACCATCATTGGAGGAATCTTCATCTCCTAAGGGGGTGCTCCAGAACACGGGCAGC 453           Db         401 ACCATCATTGGAGCAGCAGCAATCTTCATCTCCTAAGGGCGTGCTCCCAGAACACGGGCAGC 460	Oy 454 GIGGGCAIGICIGACCAICTGGACGGIGIGIGGGCCCTGTCACTAITTGGAGCTTTG 513	QY         514 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTTG         573           IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Qy 574 GAAGTCTTTGGTCCATTACAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC 633	Qy 634 CCTGCAGCTACTGCTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT 693	OY 694 AITCAAIGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA 753	QY         754 GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC         813           IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	OY 814 TITIGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA 873	Qy         874 GGTCAAACGCAGAACTITAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG 933	Qy 934 CCACTGGCTTTTTATTATGGAATGTATGCATATGCTGGCTG
934 CCACTGGCTTTTTATTATGGAATGTATGCTGGTGGTTTTACCTCCAACTTTGTT 993 947 CCACTGGCTTTTTATTATGGAATGTATGCATGCTGGCTGG	1354 ACATGATATGCTCTTCTGGAGACCTGGACAGTCTTTTGAATTTCCTCAGTTTTGCC 1413 	1414 AGGIGGCTITTAITGGGCIGGCAGTIGCIGGGCTGAITTAICTICGAIACAAATGCCCA 1473 	1474 GATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGC 1533 1487 GATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCATGTTC 1546	1534 CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGATTGGCTTCGTC 1593 	1594 ATCACTCTGACTGGGTATTATCTCTTTATTATGGGACAAGAAGCCAGG 1653 	1654 IGGITTAGAATAATGTCAGAGAAATAACCAGAACAITACAAATAATACTGGAAGTTGTA 1713 	1714 CCAGAAGAAGATAAGAACTAATGGACTTCAGATCTTGGCAATCTGCCAAGGGG 1773 	1774 GACACAAATAGGGATTTTACTTCATTTCTGAAGTCTAGACAATACAACTTTGGTG 1833 	1834 ATAAACAAAAGGAGTCAGTTATTTTTATTCATATATTTTAGCATATTCGAACTAATTCT 1893 	1894 AAGAAATTTAGTTATAACTCTATGTAGTTATAGAAAGTGAATATGCAGTTATTCTATGAG 1953 	1954 TGGCACAATTCTTGAGTCTCTGATACCTACC 1984 	

0; 1054 AITGTCACCATIGGCIAIGIGCIGACAAAIGIGGCCIACTITACGACCATTAAIGCIGAG 1113 393 NGTGGGGTCCTGTCACTATTTGGAGCTTTG 513 573 413 473 753 rgcagcgcccggarccagartrrctraacc 813 653 773 173 453 233 633 693 533 TAGICCCIGGAGITAIGCAGCTAATTAAA 873 993 CAGGAAGAGATTCAAGTATTACGCGGTTG 933 TTACTGAGGGAGTCTCCATTATCATTGGC CCTAAGGGCGTGCTCCAGAACACGGGCAGC AATCTGGAGGTCATTACACATATATTTG TTGGACGCTACATTCTGGAACCATTTTT AGCTCATTACAGCTGTGGGCATAACTGTA AGCTCATTACAGCTGTGGGCATAACTGTA NTAGTCCCTGGAGTTATGCAGCTAATTAAA TACTGAGGGAGTCTCCATTATCATTGGC CTAAGGGCGTGCTCCAGAACACGGGCAGC GAGTCTGGGTGGAACTCCTCATAATACGC TTGGACGCTACATTCTGGAACCATTTTT ATGCTGGCTGGTTTTACCTCAACTTTGTT Argeregerirriacercaecriferi Gaps · 0 DB 14; Length 1542; Indels 0, g ò

834 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 893 1114 GAGCTGCTGCTTTCAAATGCAGTGGCACTTTTCTGAGCGGTACTGGGAAATTTC 1173	US-10-1 Ouery Best Match	63-866-34  Match Local Similarity 100.0%; Pred. No. 0; es 1339; Conservative 0; Mismatches 0; Indele 334 GAGAAAGTGCAAGTGAAAAGTCAATTTACTGAAGAGGAATCTT
CATTAGCAGTTCTTTGTTGCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTGTTTGCTGTCCATGAACGGTGGTGTGTTGCTGTCGTGTGTTGTTGCTGTGTTGTTG	g ag &	GAGAAAGTGCAGCTGAAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC 39  ACCATCATTGGAGGAAAGTCTTCTCCTAAGGGCGTGCTCCATTATCATTGGC 30
1014 ILLUCISICICCAGGITATICIAIGITGCGCCTCCGAGAGGGCCACCTTCCAGAATCCTC 1073 1294 TCCATGATTCATGCCGCAACCACACTCCTCTACCACCTGTTATGTTTTGCACCCTTTG 1353 1074 TCCATGATTCATGTCCGCAAGCACTCCTCTACCACCTGTTATTGTTTTGCACCCTTTG 1133	90 OX	301 ACCATCATTGGAGCAGGAATCTTCATCTCTCTAAGGGGGTGCTCCAGAACACGGGCAGC 360 454 GTGGGCATGTCTCTGACCATCTGGACGTGTGTGGGGTCCTGTCACTATTTGGAGCTTTG 513
1354 ACANDGATAATGCTCTTCTGGAGACCTCGACAGTCTTTGGATTTCCTCAGTTTTGCC 1413	% a	514 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG 573 
1414 AGGTOGCTTTTTATTGGGCTOGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCA 1473 	ζζ, qq	574 GAAGICITIGGICCAITACCAGCITITGIACGAGICTGGGAGCICCCCAIAAIACGC 633 
1474 GATATGCATCGTTCAAGGTGCCACTGTTCATCCCAGCTTTGTTTTCCTTCACATGC 1533 	QY Db	634 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT 693 61 CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT 600
1534 CTCTTCATGGTTGCCCTTTCCCTCTATTCGCACCCATTAGTACAGGGATTGGCTTCGTC 1593	V QV	694 ATTCAANGTGAAATCCCTGAACTTGGGATCAAGCTCATTACAGCTGTGGGCATAACTGTA 753 601 ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA 660
1594 ATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTTATTATATGGGACAAGAAACCCAGG 1653 	SP 62	754 GIGAIGGICCTAAAIAGCAIGAGIGICAGCIGGAGCGCCCGGAICCCAGAITTICTIAACC 813 661 GIGAIGGICCTAAAIAGCAIGAGIGICAGCIGGAGCGCCCGGAICCAGAITTICITAACC 720
TGGTTTAGAATAATGTCAGAGAAAATAACCAGAACATTACAAATAATAATACTGGAAGTTGTA 1713 	ත් ස	814 TITIGGAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA 873 
1714 CCAGAAGAAGATAAGTTATGAACTAATGGACTTGAGATCT 1753 	QV Op	874 GGTCAAACGCAGAACTITAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG 933 
RESULT 14 US-10-163-866-34 ; Sequence 34, Application US/10163866 ; Publication No. US20030027188A1 ; GENERAL INFORMATION; INC.	8 8 8	934 CCACTGGCTTTTTATTATGGAATGTATGCATATGCTGGCTG
VENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE NACE: EXO2-080C MICATION WUMBER: US/10/163,866 MING DATE: 2002-06-05 CARTON NUMBER: US 66/296 076	Ç. da	ATTGTCACCATTGGCTATGTGCTGACAATGTGGCCTACTTTACGACCATTAATGCTGAG 1
4G DATE: 2001-06-05 CATION NUMBER: US 60/328,605 4G DATE: 2001-10-10 CATION NUMBER: IS 60/338 733	da Db	1114 GAGCTGCTTTCAAATGCAGTGACAGTGACCTTTTCTGAGGGGCTACTGGGAAATTTC 1173 1021 GAGCTGCTGCTTTCAAATGCAGTGACAGTGACCTTTTCTGAGGGGCTACTGGGAAATTTC 1080
IG DATE: 2001-10-22 CATION NUMBER: US 60/357,253 IG DATE: 2002-02-15 CATION NUMBER: US 60/357,600	% ଶ	1174 TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTGTG 1233
4G DATE: 2002-02-15 BEO ID NOS: 54 Patentin version 3.1	රු අ	1234 TITGCTGTCTCCAGGTTAITCTAIGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATCCTC 1293
LENGTH: 2000 TYPE: DNA ORGANISM: Homo sapiens	oy d	1294 TCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTG 1353

574 GAAGICTITGGTCCAITACCAGCTITTGTACGAGTCTGGGTGGAACTCCTCAIAATACGC 633 368 GAAGICTITGGTCCAITACCAGCTITTGTACGAGTCTGGGTGGAACTCCTCAIAATACGC 427 634 CCTGCAGCTACTGCTGTGATATCCCTGGCAITTGGAGCTCACAITCTGGAACCAITTTTT 693 [	754 GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC 813 	814 TITIGCAAGCTCACAGCAATTCTGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA 873 	874 GGTCAAAGGCAGAACTITAAAGACGCCTTTTCAGGAAGATTCAAGTAITACGCGGTTG 933	934 CCACTGGCTTTTATTATGAATGTATGCATATGCTGCTGGTTTTACCTCAACTTTGTT 993 728 CCACTGGCTTTTTATTATGGAATGTATGCATATGCTGGCTG	994 ACTGAAGAAGTAGAAAACCCTGAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1053 	1054 ATTGTCACCATTGGCTATGTGCTGACAAATGTGGCCTACTTTACGACCATTAATGCTGAG 1113	1114 GAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC 1173	1174 TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCCATGAACGGTGGTG 1233	1234 TITGCIGICICCAGGITALICIAIGEIGCGICTCGAGAGGGICACCTICCAGAAAICCIC 1293 1028 TITGCIGICICCAGGITALICIAIGIIGCGICICCGAGAGGICACCTICCAGAAAICCIC 1087	1294 TCCATGATTCATGTCCGCAAGCACACTCTACCAGCTGTTATTGTTTTGCACCCTTTG 1353	1354 ACBANGANAANGCTCTTCTGGAGACCTCGACACTCTTTGAATTTCCTCAGTTTTGCC 1413	1414 AGGIGGCITITIAITGGGCIGGCAGITGCIGGGCIGATITAICITCGAIACAAAIGCCCA 1473 	1474 GATAIGCAICGTICATTICAAGGIGCCACIGITCAICCAGCITIGITITICCTICACAIGC 1533 	1534 CTCTTCATGGTTGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC 1593	1594 ATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTTATTATGGACAAGAAACCCAGG 1653 
6 6 6 6 6	95 95	95 dg	Sy da	λ O	85 G	co P	Qy	Qy	QY	QV	QY	OY Db	g d	è a	Qy Dp
													-		
00   00   00   00   00   00   00   0	OY 1534 CICTICARGGITGCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC 1593  Db 1441 CICTICARGGITGCCCTTTCCCTCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC 1500	QY 1594 ATCACTCTGACTGGAGTCCCTGCGTATTATCTCTTTATATATGGGACAAGAAACCCAGG 1653	Qy 1654 IGGITIAGAATAAIGICAG 1672 	ESULT 15 S-10-163-866-52	Sequence 52, Application US/10163866 Publication No. US20030027188A1 GENERAL INPORMATION: APPLICANT: EXELIXIS, INC.	TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE P53 PATHWAY AND METHODS OF USE FILE REFERENCE: EX02-080C CURRENT APPLICATION NUMBER: US/10/163,866 CURRENT FILING DATE: 2002-06-05	PRIOR APPLICATION NUMBER: US 60/296,076  PRIOR FILING DATE: 2001-06-05  PRIOR APPLICATION NUMBER: US 60/328,605  PRIOR FILING DATE: 2001-10-10	PRIOR APPLICATION NUMBER: US 60/338,733 PRIOR FILING DATE: 2001-10-22 PRIOR APPLICATION NUMBER: US 60/357,253 PRIOR FILING DATE: 2002-02-15	PRIOR APPLICATION NUMBER: US 60/357,600 PRIOR FILING DATE: 2002-02-15 NUMBER OF SEQ ID NOS: 54 SOFTWARE: Patentin version 3.1	; SEQ ID NO 52 ; TENGTH 1528 ; TYPE: DNA ; ORGANISM: Homo sapiens	<pre>L0-163-866-52 lery Match</pre>	Macches 1399; Conservative 0; Mismatches 2; indels 0; Caps 0;  Qy 334 GAGAAAGTGCAGCTGAAGAGGAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC 393	128 GAGAMGIGCAGCIGAAGAGGAAGICHTIMCIGAGGGGAGICICCAILMICAILGGC 10 394 ACCATCATTGGAGGAATCTTCATCTCCTAAGGGGGGGGGCTGCTCCAGAACACGGGGCAGC 45 1001	188 ACCAICALIGGAGCASGAARICIICAICICCIAAGGGCGGGGTCCACAAAAGGGCGGCCAGC 2% 454 GIGGGCAIGTCTCTGACCATCTGGACGGTGTGTGGGGGTCCTGTCACTATTTGGAGCTTTTG 51	248 GIGGGCGIGTCICIGACCAICIGGACGGIGIGGGGGGCCGICACIGITAGGACCITIG 514 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATTTTG 308 TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATTTTTTTT

g 8

QQ

Search completed: October 30, 2003, 10:16:49 Job time : 462 secs

δ

Run

ŏ

```
48, App
49, Appli
Appli
Appli
                                                                                                                                                                                           6965, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Appl
                                      Appli
Appli
Appli
Appli
Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2, 7
4876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
                                                                                                   Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                          Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence 1
                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                           Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                     Seguence
Seguence
Seguence
                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
Sequence
                                      Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
           Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                              Sequence
US-09-556-273-11
US-09-0556-273-11
US-09-012-7110-10
US-09-012-7110-10
US-09-491-14
US-08-475-886-4
US-08-475-886-4
US-08-475-886-4
US-08-475-886-4
US-08-475-886-4
US-08-475-886-4
US-08-475-886-4
US-08-475-886-4
US-08-475-886-4
US-08-397-232-2
US-08-397-232-2
US-08-397-232-2
US-08-397-232-2
US-08-397-232-1
US-08-397-232-1
US-08-397-233-1
US-08-489-847-249
US-09-653-499-4
US-09-653-499-4
US-09-653-499-1
US-08-940-095-156
US-08-940-095-166
US-08-940-095-1184
US-08-940-095-1184
US-08-940-095-1184
US-08-940-095-1184
US-08-940-095-1184
US-08-940-095-1184
US-08-940-095-1184
US-09-453-119-1166
US-09-453-8818-1172
US-09-453-8818-1172
US-09-453-8818-1172
US-09-453-8818-1172
US-09-453-8818-1172
US-09-453-8818-1173
US-09-453-8818-1173
US-08-940-136-1166
US-08-940-136-1176
US-08-940-136-1166
US-08-940-136-1166
US-08-940-136-1166
US-08-940-136-1166
US-08-940-136-1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-453-841-172
US-09-453-841-177
US-09-453-841-184
US-09-227-357-624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-328-352-4876
US-09-328-352-6965
US-08-487-748A-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-971-089-2
                                                                                                                                        υυ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                0 0 0 0 0 0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                            1, Appli
1, Appli
308, App
308, App
405, App
6531, App
6531, Appli
3, Appli
3, Appli
1995, Ap
                                                                 , Search time 39 Seconds
(without alignments)
4858.154 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to have a
being printed,
                                                                                                                       ....ttattaaaaaaaaaaaaa 2239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              to, is the number of results predicted by chance to Pyreater than or equal to the score of the result bein derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                               /cgn2_6/ptcdata/2/jaa/5A_COMB.pep:*
/cgn2_6/ptcdata/2/jaa/5B_COMB.pep:*
/cgn2_6/ptcdata/2/jaa/6A_COMB.pep:*
/cgn2_6/ptcdata/2/jaa/6B_COMB.pep:*
/cgn2_6/ptcdata/2/jaa/PCTUS_COMB.pep:*
/cgn2_6/ptcdata/2/jaa/PCTUS_COMB.pep:*
             5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-073-362-1

US-09-243-920-1

US-09-732-210-157

US-09-071-035-306

US-09-198-452A-405

US-09-198-452A-405

US-09-198-452A-410

US-09-232-6531

US-09-243-92-3

US-09-252-991A-19555

US-09-012-710-11
                                                 frame_plus_n2p model
                                                                                                                                                                                                                                  hits satisfying chosen parameters:
                                                                                                                                                                                               residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                            Post-processing: Listing first 1000 summaries
              GenCore version (c) 1993 - 2003
                                                                                                                                                 60.0
60.0
7.0
                                                                  October 31, 2003, 11:39:24
                                                                                                                        ggaggttgaagtgagcagag
                                                                                                                                                 Xgapext
Ygapext
Fgapext
Delext
                                                                                                                                                                                              42310858
                                                 using
                                                                                                     US-09-667-170A-440
                                                                                                                                                                                                                                                    seq length: 0 seq length: 20000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                     . .
                                                                                                                                                                     •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                               seds,
                                                 protein search,
                                                                                                                                                 60.0
60.0
6.0
6.0
                                                                                                                                                 Xgapop
Ygapop
Fgapop
Delop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the
                                                                                                                                                                                             328717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match
                                                                                                                                         OFICO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          greater
                                                                                                                                                                                                                                                                                                                                                                                                                                             οŧ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                 score:
                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           score ga
                                                    ı
                                                                                                                                                                                                                                  Total number
                                                                                                                                                                                                                                                   Minimum DB 8
Maximum DB 8
                                                  nucleic
                                                                                                                                                                                                               Word size:
                                                                                                                         Sequence:
                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                      Title:
Perfect
                                                                    on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

0000

Sequence 20559, A Sequence 4326, Ap Sequence 6, Appli Sequence 6497, Ap Sequence 6497, Appliance 649	Sequence 28339, A Sequence 13, Appl Sequence 17668, A	Sequence 368, App	Sequence 2, Appli	Sequence 2, Appli Sequence 27226, A	Seguence 24799, A Seguence 16, Appl	Sequence 12, Appl	Sequence 255, App Sequence 6, Appli	Sequence 3, Appli	Seguence 3219, Ap	Sequence 19058, App	Sequence 127, App	INFORMATION FOR					٠.	n, ,		, , ,	Sequence 17254, A			,,,							., -			u, (	, . ,	4	4. O	, w	w	., (,	, .,	$\mathbf{v}$	', u	, , ,		.,	w .	4	4 (4
US-09-252-991A-20559 US-09-107-532A-4326 US-08-466-103A-6 US-09-107-532A-6497	US-09-248-588-13 US-09-252-991A-1766	US-09-071-035-368	US-09-044-404A-2	US-09-252-99	US-09-252-991A-2479 US-08-415-751-16	US-08-466-10	US-09-489-84 US-08-896-36	US-08-809-286B-3	US-	US-09-252-991A-1	US-09-489-847-127	US/08/622 IIS-09-165-9224-1	US-09-252-991A-224	US-09-252-991A-2825	US-09-198-452A-2	US-09-071-035-260	US-09-599-360B-9	US-09-198-452A-554	US-09-134-001C-3	US-08-466-103A-2	US-	US-09-107-532A-5466	US-09-252-991A-2	dS Si	us-	us-	US-09-636-499-7	-SD	US-09-384-212-2 US-09-252-991A-	US-08-942-012B-29	US-08-342-012B-30	US-09-252-991A-	US-09-328-352-7320	US-09-134-001C-52	us,	US-	130	us-	us-	20 5	US-09-198-452A	US-09-071-035-64	US-09-252-991A	US-09-252-991A-205	-Sn	US-09-252-991A-245	US-09-0/1-035-62	US-09-252-99-XI	US-09-232-468A-22
0880 0880 0880 44044																																																	
0.0000					,	•			-		-			-			-		•		1.0	1.0	1.0	1.0	0.1	1.0	1.0	1.0	0.1	1.0	J -	.0.	1.0	0.0	1.0	0.0	0.0	1.0	0.0	0.1	0.0	0.1	0.0	1.0	1.0	0.1	) · ·	0.0	0.1
rrrr		۲,	. ۲ .			7		7	r r		۲ ،			7			7	<b>r</b> 1		7	L L	, ,	7	۲ ۲	7	r 1	- 1	7		7	- 1-	٠,	7	<i>C C</i>		۲ ،		7	r 1	- 1	7	r 1	- 1-		7	۲ ،	- 1	- 1-	٠,
0 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	164 C 165		C 168				174	c 176	177	c 179			C 183			C 187		C 189	190 191	192	0 193		196	197	1199	200	201	203	0 2002 4005	c 206		200						c 217		220	221	222	224 C 224		c 226		8 67 C		c 231
																		_	_																														$\overline{}$
	equence 16	equence 16	ence 15	equence 15	equence 15 equence 15	equence 15	equence 15 equence 15	equence 15	equence 24	equence 13	equence 14	equence 4,	equence 4,	equence 5,	equence 13	equence 13	equence 14	equence 13	equence 14 equence 13	equence 14	Sequence 13, Appl Sequence 14, Appl	equence 13	equence 14	133	equence 13	equence 1	Sequence 29620, A Sequence 8016, Ap	equence	equence :	Sequence 4699, Ap	equence	equence 2	equence		equence	equence 2	equence 1	quence	equence ?	equence (	equence	equence (	eduence	equence	ednence	ence 4	equence f	quence	ednence
equence 16 equence 16 equence 16 equence 16	937-399-16 Sequence 16 310-367-16 Sequence 16	032-337-16 Sequence 16 464-231-16 Sequence 16	487-748A-15 Sequence 15	480-070C-15 Sequence 15	829-525-15 Sequence 15 609-583A-15 Sequence 15	937-399-15 Sequence 15	310-36/-15 Sequence 15 032-337-15 Sequence 15	464-231-15 Sequence 15	473-020A-24 Sequence 24 732-210-225 Semience 22	487-748A-13 Sequence 13	487-748A-14 Sequence 14	/lo-588-4 Sequence 4, 716-588-5 Semence 5.	966-444-4 Sequence 4,	966-444-5 Sequence 5,	398-633-14 Sequence 13	480-070C-13 Sequence 13	480-070C-14 Sequence 14	829-525-13 Sequence 13	829-525-14 Sequence 14 609-583A-13 Sequence 13	609-583A-14 Sequence 14	937-399-13 Sequence 13 937-399-14 Sequence 14	310-367-13 Sequence 13	310-367-14 Sequence 14	032-337-13 Sequence 13	464-231-13 Sequence 13	464-231-14 Seguence 1	252-391A-29520 Sequence 2 328-352-8016 Sequence 8	569-147-76 Sequence	559-14/-82 252-991A-31652 Sequence	107-532A-4699 Sequence	232-331A-26263 Sequence 2896-365-9	252-991A-20099 Sequence 2	252-991A-30401 Sequence	252-991A-18044 Sequence 1 615-192A-341 Sequence 3	252-991A-23275 Sequence	252-991A-29815 Sequence 2867-030B-16	987-030B-18 Sequence 3	523-686-3 Sequence	252-991A-25365 Sequence 2	232-331A-20110 Sequence 2428-415-8 Semence	379-685-8 Sequence	854-029-8 Sequence 8	134-001C-4608 Sequence	252-991A-27285 Sequence	825-781-3 Sequence	825-781-4 Sequence	328-352-5872 Semence	252-991A-25445 Sequence	252-991A-30969 Sequence
398-633-16 Sequence 16 480-070C-16 Sequence 16 829-525-16 Sequence 16 609-583A-16 Sequence 16 177-249-145 Sequence 14	3 US-08-937-399-16 Sequence 16 4 US-09-310-367-16 Sequence 16	4 US-09-032-337-16 Sequence 16 4 US-09-464-231-16 Semience 16	1 US-08-487-748A-15 Sequence 15	3 US-08-480-070C-15 Sequence 15	3 US-08-829-525-15 Sequence 15 3 US-08-609-583A-15 Sequence 15	3 US-08-937-399-15 Sequence 15	4 US-09-310-36/-15 Sequence 15 4 US-09-032-337-15 Sequence 15	4 US-09-464-231-15 Sequence 15	2 US-08-473-020A-24 Sequence 24 4 US-09-732-210-225 Semience 22	1 US-08-487-748A-13 Sequence 13	1 US-08-487-748A-14 Sequence 14	1 US-08-716-588-5 Sequence 4,	2 US-08-966-444-4 Sequence 4,	2 US-08-966-444-5 Sequence 5,	3 US-US-398-633-13 Sequence 13 3 US-08-398-633-14 Sequence 14	3 US-08-480-070C-13 Sequence 13	3 US-08-480-070C-14 Sequence 14	3 US-08-829-525-13 Sequence 13	3 US-08-829-525-14 Sequence 14 3 US-08-609-583A-13 Sequence 13	3 US-08-609-583A-14 Sequence 14	3 US-08-937-399-13 Sequence 13 3 US-08-937-399-14 Semence 14	4 US-09-310-367-13 Sequence 13	4 US-09-310-367-14 Sequence 14	4 US-09-032-337-13 Seguence 13 4 US-09-032-337-14 Semience 14	4 US-09-464-231-13 Sequence 13	4 US-09-464-231-14 Seguence 1	4 US-09-252-391A-29620 Sequence 4 US-09-328-352-8016	3 US-08-569-147-76 Seguence	3 US-US-559-14/-82 4 US-09-252-991A-31652 Sequence	4 US-09-107-532A-4699 Sequence	2 11S-08-896-365-9	4 US-09-252-991A-20099 Sequence 2	4 US-09-252-991A-30401 Sequence	4 US-09-252-991A-18044 Sequence 1 4 US-09-615-192A-341 Sequence 3	4 US-09-252-991A-23275 Seguence	4 US-09-252-991A-29815 Sequence 2	5 PCI-US95-06119-16 Sequence 1	4 US-09-523-686-3 Sequence	4 US-09-252-991A-25365 Sequence 2	1 US-08-428-415-8 Segmence 2	1 US-08-379-685-8 Sequence	2 US-U8-854-029-8 Sequence 8	4 US-09-134-001C-4608 Sequence	4 US-09-252-991A-27285 Sequence	2 US-08-825-781-3 Sequence	2 US-08-825-781-4 Sequence (	4 US-09-328-352-5872 Segmence	4 US-09-252-991A-25445 Sequence	4 US-09-252-991A-30969 Sequence
3 US-08-398-633-16 Sequence 16 3 US-08-480-070C-16 Sequence 16 3 US-08-829-525-16 Sequence 16 3 US-08-609-583A-16 Sequence 16 3 US-09-09-545 Sequence 14	.0 107 3 US-08-937-399-16 Sequence 16 .0 107 4 US-09-310-367-16 Sequence 16	.0 107 4 US-09-032-337-16 Sequence 16 .0 107 4 US-09-464-231-16 Sequence 16	.0 110 1 US-08-487-748A-15 Sequence 15	.0 110 3 US-08-480-070C-15 Sequence 15	.0 110 3 US-08-829-525-15 Sequence 15 .0 110 3 US-08-609-583A-15 Sequence 15	.0 110 3 US-08-937-399-15 Sequence 15	.0 IIO 4 US-09-310-36/-15 Sequence 15 .0 IIO 4 US-09-032-337-15 Sequence 15	.0 110 4 US-09-464-231-15 Sequence 15	.0 114 2 US-08-473-020A-24 Sequence 24 .0 129 4 US-09-732-210-225 Semience 22	.0 130 1 US-08-487-748A-13 Sequence 13	.0 130 1 US-08-487-748A-14 Seguence 14	.0 130 1 US-08-716-588-5 Segmence 4,	.0 130 2 US-08-966-444-4 Sequence 4,	.0 130 2 US-08-966-444-5 Sequence 5,	.0 130 3 US-08-398-633-14 Sequence 13	.0 130 3 US-08-480-070C-13 Sequence 13	.0 130 3 US-08-480-070C-14 Sequence 14	.0 130 3 US-08-829-525-13 Sequence 13	.0 130 3 US-08-609-583A-13 Sequence 14	.0 130 3 US-08-609-583A-14 Sequence 14	.0 130 3 US-08-937-399-13 Sequence 13 .0 130 3 US-08-937-399-14 Sequence 14	.0 130 4 US-09-310-367-13 Sequence 13	.0 130 4 US-09-310-367-14 Sequence 14	.0 130 4 US-09-032-337-13 Sequence 13	.0 130 4 US-09-464-231-13 Sequence 13	.0 130 4 US-09-464-231-14 Seguence 1	.0 139 4 US-09-328-352-8016 Sequence .	.0 140 3 US-08-569-147-76 Sequence	.0 140 4 US-08-569-14/-82 sequence 3	.0 140 4 US-09-107-532A-4699 Sequence	.0 153 2 115-08-896-365-9	.0 155 4 US-09-252-991A-20099 Sequence 2	.0 155 4 US-09-252-991A-30401 Sequence	.0 157 4 US-09-252-991A-18044 Sequence 1	.0 160 4 US-09-252-991A-23275 Sequence	.0 162 4 US-09-252-991A-29815 Seguence 2	.0 177 5 PCT-US95-06119-16 Sequence 1	.0 182 4 US-09-523-686-3 Sequence	.0 191 4 US-09-252-991A-25365 Sequence 2	.0 211 1 US-08-428-415-8 Semience	.0 211 1 US-08-379-685-8 Sequence	.0 211 2 US-U8-854-029-8 Sequence 8	.0 224 4 US-09-134-001C-4608 Sequence	.0 236 4 US-09-252-991A-27285 Sequence	.0 241 2 US-08-825-781-3 Sequence	.0 241 2 US-08-825-781-4 Sequence (	.0 246 4 US-09-328-352-5872 Sequence	.0 254 4 US-09-252-991A-25445 Sequence	.0 258 4 US-09-252-991A-30969 Sequence
.0 107 3 US-08-398-633-16 Sequence 16 .0 107 3 US-08-480-070C-16 Sequence 16 .0 107 3 US-08-829-525-16 Sequence 16 .0 107 3 US-08-609-583A-16 Sequence 16 .0 107 3 US-09-177-249-145 Sequence 16	1.0 107 3 US-08-937-399-16 Sequence 16 1.0 107 4 US-09-310-367-16 Sequence 16	1.0 107 4 US-09-032-337-16 Sequence 16 1.0 107 4 US-09-464-231-16 Semience 16	1.0 110 1 US-08-487-748A-15 Sequence 15	1.0 110 3 US-08-480-070C-15 Sequence 15	1.0 110 3 US-08-829-525-15 Sequence 15 1.0 110 3 US-08-609-583A-15 Sequence 15	1.0 110 3 US-08-937-399-15 Sequence 15	1.0 110 4 US-09-310-36/-15 Sequence 15 1.0 110 4 US-09-032-337-15 Sequence 15	1.0 110 4 US-09-464-231-15 Sequence 15	1.0 114 2 US-08-473-020A-24 Sequence 24 1.0 129 4 US-09-732-210-225 Sequence 22	1.0 130 1 US-08-487-748A-13 Sequence 13	1.0 130 1 US-08-487-748A-14 Sequence 14	1.0 130 1 US-08-716-588-4 Sequence 4,	1.0 130 2 US-08-966-444-4 Sequence 4,	1.0 130 2 US-08-966-444-5 Sequence 5,	1.0 130 3 US-08-398-633-13 Seguence 13	1.0 130 3 US-08-480-070C-13 Sequence 13	1.0 130 3 US-08-480-070C-14 Sequence 14	1.0 130 3 US-08-829-525-13 Sequence 13	1.0 130 3 US-08-609-583A-13 Sequence 14	1.0 130 3 US-08-609-583A-14 Sequence 14	1.0 130 3 US-08-937-399-13 Sequence 13 1.0 130 3 US-08-937-399-14 Sequence 14	1.0 130 4 US-09-310-367-13 Sequence 13	1.0 130 4 US-09-310-367-14 Sequence 14	1.0 130 4 US-09-032-337-13 Sequence 13	1.0 130 4 US-09-464-231-13 Sequence 13	1.0 130 4 US-09-464-231-14 Sequence 1	1:0 139 4 US-09-352-8016 Sequence 1:0 139 4 US-09-352-8016 Sequence 8	1.0 140 3 US-08-569-147-76 Sequence	1.0 140 4 US-08-59-14/-82 Sequence 1.0 140 4 US-09-252-991A-31652 Sequence 3	1.0 140 4 US-09-107-532A-4699 Sequence	1.0 153 2 IIS-08-896-365-9 Sequence a	1.0 155 4 US-09-252-991A-20099 Sequence 2	1.0 155 4 US-09-252-991A-30401 Sequence	1.0 156 4 US-09-252-991A-18044 Sequence 1	1.0 160 4 US-09-252-991A-23275 Sequence	1.0 162 4 US-09-252-991A-29815 Seguence 2	1.0 177 5 PCT-US95-06119-16 Sequence 1	1.0 182 4 US-09-523-686-3 Sequence	1.0 191 4 US-09-252-991A-25365 Sequence 2	1.0 211 1 US-08-428-415-8 Segmence Segmence 5	1.0 211 1 US-08-379-685-8 Sequence	1.0 211 2 US-US-854-029-8 Seguence 8	1.0 224 4 US-09-134-001C-4608 Sequence	1.0 236 4 US-09-252-991A-27285 Sequence	1.0 241 2 US-08-825-781-3 Sequence	1.0 241 2 US-08-825-781-4 Sequence (	1.0 246 4 US-09-328-352-5872 Semiced	1.0 254 4 US-09-252-991A-25445 Sequence 2	1.0 258 4 US-09-252-991A-30969 Sequence

à
H
н
. •
0
-11
Н
0
٠.
o
_
4
4
1
៧
ö
$\tilde{}$
$\vdash$
1
7
io
õ
•
g
0
1
us
þ

Sequence 394, App Sequence 394, App Sequence 394, App Sequence 2, Appli Sequence 2, Appli	740HC	e	1101	16, 1, 75,	54,	4,00	4.4.0	30,0	246	1,	, 8°,	ატი, 98,	18. 98,	equence 18, equence 18, equence 18	equence 24, equence 18,	equence 55,	equence 52, equence 6,	equence 34, equence 34,	equence 52, equence 28, equence 33	equence 38,	equence 47,	equence 5,	equence s, equence 12, equence 55,	equence 162	equence 30, App		quence 38, quence 40,	ence 4,
4 US-08-469-260A-394 4 US-08-488-446-394 4 US-08-467-344A-394 1 US-08-450-332-2 2 US-08-637-440-2	3 US-U3-U04-405C-2 4 US-09-360-237-43 4 US-09-524-435-6 4 US-09-360-237-17 4 US-09-524-435-7																											
2864 2864 3038 3038	2 2 2 2 2 2 3 3 3 3 4 3 4 3 4 4 4 5 5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7										44.	<b>한 한 한</b>														8 8 8		
0.0.0.0																												
rrrrr	~	שטטט	o o o o	<b>660</b>	<b>.</b> • • •	νωνι	စဖဖ	w w w	o oo o	ωψ	ωων	שעע	യയ	y ov ov	9 9 9	ωω	ဖဖ	10 O	စဖေဖ	owi	o (o (	יטפ	0 40 40	·ν	o vo v	שטס	ω ω	φ
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		. 0 315 0 316 0 317		322 322 323 324	325 0 325 327	355	330 332 332	333 334 334	337 337			0 0 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	345 345 346	347 348 340	C 350 351	c 352 353		a 356 a 357	9 0 0 9 0 0 9 0 0 9 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	7 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	ა ი ი ი ი ი 4 მ ი		0 369		373 373 374	375 376	377
Sequence 53, Appl Sequence 5883, Ap Sequence 2, Appli Sequence 6, Appli Sequence 125, App	N N O H o	9 9 9 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	o o o o	0 0 0	0 0 0	0 0 0	o o o	0 0 0	n on or	0 0	0 0	0 0 0	9 9	equence	ednence	9 9	equence equence	equence	equence	ednence	edneuce	edneuce	equence equence equence	equence	ednence	Sequence 14, Appl Sequence 2, Appli Sequence 7, Appli	equence	equence
4 US-09-784-984B-53 4 US-09-107-532A-5883 2 US-08-724-394A-2 1 US-08-142-439A-6 2 US-08-142-551B-125	US-08-869-4/7-6 US-08-468-249A-1 US-09-107-532A-6 US-09-097-889-23 US-09-098-079-23	US-0 US-0 US-0	0-SU 0-SU	US-09-613-303-51 US-09-071-035-264 US-09-107-532A-56	US-09-747-259-18 US-09-816-744-18 US-09-185-160-11	o-sn	0-SU 0-SU 0S-0	US-0	o-sn o-sn	US-09-252-991A-3305	US-09-107-532A-6	US-0 US-0	us-o	US-0 US-0	US-09-449-285A-4 US-08-194-290-7	us-o	O-SD	us-o	0-8U 0-8U	- SO - 6	US-U8-726-214-12 US-08-685-871-2	US-08-755-587-18 US-08-755-587-18	o-sn O-sn	US-09-071-035-26	US-09-071-035-26	US-08-477-451-1 US-08-962-284-2 US-08-348-891A-	US-08-905-817-7 US-09-252-991A-	US-09-215-694-10
55 50 50 50 50 50 50 50 50 50 50 50 50 5																												
000000																												
				<i>L L L</i>		. r r ı				7 7	r r (						7 7	L L I		- 1- 1	- 1- 1	~ r ı		r r	· r- ı			7
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	**********		0 0 0 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			c 255			0 263 0 264			0 269 0 270 170		C 274 C 275		0 279 280					0 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		0 2 2 4 5 2 4 5 5	C 296	D. 0.00		C 302 303	304

Sequence 26, Appl Sequence 245, App Sequence 245, Appl Sequence 6, Appli Sequence 97, Appli Sequence 97, Appli	100	100	100	917	9,	9,7,	161	13	3 % 5	166	104	140	40	13,	44. 96.	1114	448	1 22	116	38	9 0	82	7 7	ω <sub>0</sub>	4.	ų, rų,	11.	256	32,	32,
US-09-463-228-26 US-08-488-446-245 US-08-467-344A-245 US-08-313-681A-6 US-08-313-681A-6 US-08-505-468-97 US-08-801-028-97																												US-09-227-357-256		
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8																														
ന ന ന ന ന ന																														
00000																														
νουουο	, vo vo v	ωφω	νφφι	o oo o	ωω	ωωω	οφο	v v v	o o o	9 49 1	υυο	φφ	φφ	ω ω ω	o vo v	φφ	<b>6</b> 6	w w u	o w w	(O) (O)	w w	wφ	• • •	66	<b>, 6</b> , 1	ρψi	യ യ	· w	o vo c	യയ
00 4444444 1000000000000000000000000000	ር 14 44 44 10 10 10 10 10 10 10 10 10 10 10 10 10 1		1 4 4 4 1 6 6 4 1 6 6 4	4 4 4 6 6 6 7 6 6 6 7	0 4 4 8 6 9 6 9	470 471 472	1 6 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5	475 476	477 C 478	4 4 V V V V V V V V V V V V V V V V V V	Ω 44 44 20 84 44 4 94 84 84 84 84 84 84 84 84 84 84 84 84 84		C 486 487	4, 4, 4 88 80 80 C	44 44 44 C C C C C C C C C C C C C C C	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 4 4 3 6 4 3 6 4	497 498	4 to 00 to 0		C 504 505		508	510		514	515 516	c 517		C 520 521 C 523
10ce 2, Appl1 10ce 13, Appl 10ce 54, Appl 10ce 54, Appl 10ce 36, Appl	9675	122	101		122	SOF	122		# 23 F	7 8 F	- 1-	12.41	-120	그었고	י איני	1 m 4	വ്യ	່ດເດ	में को ।	9 6	33	Him	144	~~	50	V 40	94	·	-ii	າ້ວິດ
Sequence Sequence Sequence Sequence Sequence Sequence	Seque Seque Seque	Seque	Seque	Segue	Segue	Sequer Sequer	Seque	Seguer	Segue	Seque	Seque	Seque	Segue	Segues	Segue	Segue	Seques	Segue	sequel Seguel Patent	Seque	Seque	Segue	Segue	Segue	Segue	Seque	Seque	Seque	Seque	Seque
4, 10, 10			34.	សសឧ	വവ																							7	7	
VCI-U096-10043-2 US-09-524-435-13 US-08-289-653-13 US-07-678-974D-54 US-08-222-851-35 US-08-222-851-36	US-08-934-915-73 US-08-945-168-60 US-08-861-338-8	US-08-651-650-21 US-08-651-650-22 US-08-400-115-7	US-08-851-843A-17	US-09-430-323-17 US-09-430-323-17 US-08-360-606B-1	US-08-940-095-15 US-08-940-093-15	US-09-276-202-5 US-09-276-202-9 US-08-940-096-155	US-09-465-719-155 US-09-453-605-155	US-09-453-838-155 US-08-940-136-155	US-09-453-841-155 US-08-468-011A-28	US-09-276-202-11 US-09-236-468A-28	US-08-752-891-7 US-09-144-178-7 US-09-276-202-10	US-09-406-854-7 PCT-US92-07865-25	US-08-432-483A-1 US-08-469-260A-557	US-08-945-289-1 US-08-488-446-557 IIS-08-467-3444-557	US-08-394-600B-4 TIS-08-376-2003-2	US-09-276-202-2 US-09-276-202-3 US-09-276-202-4	US-09-276-202-8 US-08-856-383-5	US-09-360-237-57 US-09-475-088-5	US-US-395-436C-4 PCT-US95-02513-4 S171680-14	US-09-045-632-95 US-08-405-647B-39	US-08-985-499-39 PCT-US96-03180-39	US-09-288-143-150 US-08-473-475A-3	US-08-335-844A-16 US-09-129-366-16	US-09-904-196B-7 US-08-341-018-10	US-08-470-335-209	US-09-149-476-447	US-08-467-602-206 US-08-467-602-403	US-08-469-260A-17	US-US-488-446-1/2 US-08-467-344A-17	US-09-205-258-323 US-08-400-115-8 US-08-867-0878-61
D 0 0 0 0 0	1010	440	1 H H H	1 H G	1 M M	m m m	1 (1 (1) 1 (1) (1)	44.	2 W C	20. 24.	4 4 4 1 10 W	. 4. 4. . w n	444	000 444	770	, r, r	7 3 3	7 7 1 4 4 .		m m	8 8 W 10	4.0	С 4	0 K	. m r	ა დ. ა 4	ω ω 4 4	4.4	1 M 4	100
V 4 4 4 4 4	1010	440	1 H H H	1 H G	1 M M	m m m	1 (1 (1) 1 (1) (1)	44.	2 W C	20. 24.	4 4 4 1 10 W	. 4. 4. . w n	444	000 444	770	, r, r	7 3 3	7 7 1 4 4 .		m m	8 8 W 10	4.0	С 4	0 K	. m r	ა დ. ა 4	ω ω 4 4	4.4	1 M 4	100
D 0 0 0 0 0	88.000	8.0000	.88 .21 .21 .21 .21 .21	. 8	.8 22 3	22 3 3 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.88 .22 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4	8. 23. 23. 4. E. C.	23 23 24 2	24.7	.8 24 3	.8 26 4	8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8	.8 27 24	27.2	.8 27 3 .8 27 3	.8 27 4	.8 27 4	.8 28 3 .8 .8 .8 .8 .8 .8 .8 .8 .8 .8 .8 .8 .8	.8 28 3	.8 29 4	.8 30 3	.8 30 4 83 84 84			.8 33 4 .8 33 4	.8 33 4		.8 35 2 4
2 2 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0.8 20 20 20 20 20 20 20 20 20 20 20 20 20	0.8 8.0 0.8 0.8 0.0 0.8 0.0 0.8 0.0 0.0	0.8 21 3 3 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0.8 21 21 3	0.8 22 3	0.8 22 3 0.8 22 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0.08 0.08 0.08 0.08 0.08 0.08 0.08 0.08	0.00	0.8 0.8 22 23 23 4 8 6	0.8	0.88 0.08 0.08 0.08 0.08 0.08 0.08 0.08	0.8 24 3 0.8 24 3	0.8 26 4	0.8 0.8 0.8 0.8 0.8 0.4	0.00	0.8 27 20 0.8 27 27 3	0.8 27 3 0.8 27 3	0.8 27 4	0.8 27 5	0.8 28 3	0.8 28 3	0.8 29 4	0.8 30 3	0.8 30 4	33.00	0.8	0.8 33 4 0.8 33 4	0.8 33 4	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.8 35 2 0.8 35 2

equence 4 equence 5 equence 5 equence 6 equence 2 equence 2 equence 5	nce 18, App nce 61, App nce 21, App nce 215, Ap nce 27, App nce 57, App nce 572, App nce 5972, App	equence 6 equence 6 equence 6 equence 6 equence 2 equence 2 equence 3 equence 3 equence 3 equence 1	CH 4 4 4 CH 4 0 8 8 0 C C C C C C C C C C C C C C C C	Sequence 6, Appliance 6, Appliance 625, Appliance 6226, Appliance 10, Appliance 11, Appliance 12, Appliance 13, Appliance 13, Appliance 14, Ap
60-SD 60-SD 80-SD 80-SD 80-SD 80-SD 80-SD 80-SD	US-08-956-307B-1 US-09-180-827-2 US-09-663-600A-1 US-09-663-600A-2 PCT-US94-04490A-2 US-09-328-352-75 US-09-328-352-59 US-09-318-352-59 US-09-318-352-19 US-09-732-210-11		US-08-452-592 US-09-732-210 US-08-483-2210 US-09-134-001 US-09-134-001 US-09-732-210 US-09-107-532 US-09-107-532 US-09-107-532 US-09-074-044 US-09-074-044 US-09-074-044 US-09-074-044 US-09-074-044 US-09-074-044 US-09-014-041	US-09-107-527-4635 US-09-107-527-4635 US-09-107-527-4635 US-09-107-522A-6226 US-08-479-078-10 US-08-479-078-10 US-08-598-873-19 US-08-273-146-45 US-08-273-146-45 US-09-252-945A-41 US-09-252-945A-41 US-09-252-945A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-28-887A-41 US-08-59-98-887A-41 US-08-59-98-887A-41 US-08-465-343A-11 US-09-28-598-38 PCT-US93-08744-4 US-08-479-078-2 US-08-479-078-2 US-08-479-078-2 US-08-479-078-2 US-08-479-078-2 US-08-479-078-2
	777766777667776677766777777777777777777			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ο ο ο ο ο ο ο ο ο ο ο ο	യയയയയയയയയ	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Φωωφωωωωωωωωωωωω	<b>୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ ୰ </b>
0 0 0 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	60 61 61 61 61 61 61	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	@ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @	* 4* 4* 4* 4* 10 10 10 10 10 10 10 10 10 10 10 10 10
3 2 2 2 3 3 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	16494444444446 9898994444444	866727777777777777777777777777777777777	Sequence 171, App Sequence 171, App Sequence 171, App Sequence 167, App Sequence 167, App Sequence 171, App Sequence 171, App Sequence 172, App Sequence 16, Appl Sequence 16, Appl Sequence 17145, App Sequence 17145, App Sequence 453, App Sequence 453, App Sequence 453, Appl Sequence 36, Appl Sequence 56, Appl Sequence 611, Appl Sequence 611, Appl Sequence 611, Appl
ი ის ს იი	amr 6 6	818 818 1026 1126 1126 1126 126 126 126	22 55007 101 101 101 101 101 101 101	11 11 167 167 171 171 171 188 171 188 183 183 183 183 183 183 183 183 18
US-09-328-352-57 US-09-169-015-36 US-09-133-944-25 US-09-133-944-25 US-08-137-748-8 US-09-157-748-8 US-09-80-1157-748-8 US-09-80-1157-748-8 US-09-80-1157-748-8 US-09-80-1157-748-8 US-09-80-1157-748-8 US-09-80-1157-748-8	US-09-626-580C-3 US-09-73-210-50 US-09-461-32-45 5320958-10 US-07-626-618A-1 US-07-626-618A-1 US-08-333-977-16 US-08-933-977-16 US-08-060-694-16 US-09-90-060-694-16 US-09-378-074-16	US-09-205-256-3 US-09-252-991A- US-09-3252-991A- US-09-3252-991A- US-08-307-499-1 US-08-467-282B- US-08-467-282B- US-08-468-719CC- US-08-468-719CC- US-08-468-719CC- US-09-299-268-1 US-09-299-268-1 US-09-259-268-1 US-09-259-268-1	US-09-205-258-3 US-09-107-532A- US-09-107-532A- US-08-03-655B- US-08-469-559-1 US-08-469-5569-1 US-08-469-526A- US-08-34-1018-7 US-08-34-1018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7 US-08-341-018-7	US-08-470-325-4171 US-08-467-602-171 US-09-328-352-4927 PCT-US94-050836-167 PCT-US95-06846A-171 US-09-205-258-298 US-09-107-532A-7182 US-08-963-851-16 US-09-904-615-152 US-09-904-615-152 US-09-904-615-152 US-09-107-532A-3721 US-09-26-260A-453 US-08-488-446-453 US-08-469-260A-36 US-08-388-17 US-08-469-260A-36 US-08-348-446-36 US-09-250-611-19
4 6 6 6 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	4446444644	444644446666444	44444444444	69 3 US-08-470-323-176-69 4 US-08-470-323-176-69 4 US-08-470-323-46-69 5 PCT-US94-0552-49-69 5 PCT-US95-06846A-770-4 US-08-96-381-16-71 4 US-08-96-812-003-9-72 4 US-08-46-91-73 4 US-08-46-344A-3-73 4 US-08-25-391A-1-19-19-19-19-19-19-19-19-19-19-19-19-1
80 80 80 80 80 80 80 80 80 80 80 80 80 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	88888888888888888888888888888888888888	ገጠ ቀ ቀ ID ID ቀ ቀ CU ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ ቀ
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000000000000000000000000000000000000	00000000000000000000000000000000000000	00000000000000000000000000000000000000	0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

Sequence 20170, A Sequence 21883, A Sequence 27427, A Sequence 662, App Sequence 982, App Sequence 1981, App Sequence 193, App	Sequence 289, App Sequence 3, Appli Sequence 4334, Ap	Sequence 65, Appl Sequence 65, Appl Sequence 65, Appl	Sequence 89, Appl Sequence 65, Appl Sequence 89, Appl	Sequence 65, Appl Sequence 89, Appl Sequence 29926, A	Sequence 7943, Ap Sequence 357, App	Sequence 20801, A	Sequence 88, Appl Sequence 88, Appl	Sequence 88, Appl Sequence 88, Appl	Seguence 88, Appl Seguence 321, App	Sequence 10, Appl Sequence 10, Appl	Sequence 179, App Sequence 152, App	Sequence 28665, A Sequence 30779, A	Sequence 823, App Sequence 179, App Sequence 7000, Ap	Sequence 2, Appli Sequence 41, Appl	Sequence 12, Appl Sequence 15, Appl	Sequence 41, Appl Sequence 75, Appl	Sequence 398, App Sequence 41, Appl	10.10	<u>ال</u> ا ي		Sequence 32594, A Sequence 255, App	Sequence 1142, Ap	Sequence 5202, Ap	Seguence 2, Appli Seguence 4, Appli	Sequence 11, Appl	ednence 8	equence 8	equence 20( equence 359	equence 129 equence 141	Sequence 5, Appli Sequence 3, Appli
US-09-252-991A-20170 US-09-252-991A-21883 US-09-732-210-662 US-09-732-210-982 US-09-056-256-198 US-09-072-596-193	US-09-198-452A-289 US-08-499-215-3 US-09-134-001C-4334 US-07-634-278-65 US-07-624-278-00	US-08-477-728-65 US-08-477-728-89 US-08-474-040-65	US-08-474-040-89 US-08-487-200-65 US-08-487-200-89	US-08-484-537-65 US-08-484-537-89 US-09-252-991A-29926	US-09-328-352-7943 US-08-936-165A-357 US-09-732-210-666	US-09-252-991A-20801 US-09-252-991A-27340	US-07-634-278-88 US-08-477-728-88	US-08-474-040-88 US-08-487-200-88	US-08-484-537-88 US-08-858-207A-321	US-08-256-261-10 US-08-852-299-10	US-09-168-930-1/9 US-09-199-637A-152 US-09-252-9917-2966	US-09-232-991A-2003 US-09-252-991A-30779 US-09-108-4527-625	US-09-312-283C-179 US-09-107-532A-7000	US-08-170-360-2 US-08-888-497-41	US-08-676-782-12 US-08-981-189B-15	US-09-362-230-41 US-09-198-119C-75	US-09-461-325-398 PCT-US94-07926-41	US-08-838-682-5 US-08-895-914-5	US-09-357-710A-5 US-09-690-454-155	US-09-252-991A-22958 US-09-252-991A-25530	US-09-252-991A-32594 US-09-198-452A-255	US-09-732-210-1142 US-09-732-210-1713	US-09-107-532A-5202	US-U8-U75-545-2 US-08-844-153-4	US-09-053-197A-11 US-09-085-761A-11	US-08-256-261-8	US-08-852-299-8 US-09-325-932A-176	US-09-252-991A-20068 US-09-198-452A-359	US-09-732-210-129 PCT-US95-06266-141	US-08-225-4 US-09-069-8
1115 1115 1115 1115 1116 116 116 116																														
00000000	 	888	2000 2000	2000 2000	0 0 0 0 0	8.0	8.0	8.0	8.0		0 0 0	000	8.00	0.8 0.8	8 8 9	0.8 0.8	e.e.	0.00		. e.	8. 8. 8. 9.	8.0	8.0	» «. • • •	8.0 8.0		æ.e.	8.0	0.0 8.8 8.0	8.0
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	νφυφο	φφφι	, o o o	യ യ യ	w w w	ωω	<b>6</b> 6	φφι	و م	<u>ս</u> ս ս	o w w	o vo vo	φφ	φφ	φφι	9 9	v v v	ο ω ι	o vo a	oυ	w w	φφ	94	οva	ωw	·w·	oω	oφ	<b>ω ω</b> ι	و ه
000 0 (	- 1- 1- (- (-	C 755 C 756 C 757			764 765 765	1-1-	C 769 C 770		- 1-1		77	78	c 782 c 783	നന	7.8	78	79	<b>n</b> m c	-  -	$\sigma$			800		80	80	808	α α		812 815
Sequence 3, Appli Sequence 4, Appli Sequence 4, Appli Sequence 5, Appli Sequence 3864, Ap Sequence 4, Appli Sequence 35, Appl	98838	6446	4 6 6 4	0 T C C	U 4 0	ოთ	0,0	000	nn r	- നെ ഗ	NO	32	Sequence 17, Appl Sequence 38, Appl	222	122	7	-225	50.5	140	4	4 0	equence 31, equence 74	20 10	equence 39	equence 42 equence 42	ence 81	equence 67	equence 4678 equence 5370	13, App	equence 10,
	US-08-202-389-37 US-08-036-210-26 US-08-449-609-26 US-09-227-357-630				955			o 🗅 🗀	) D E	מפׁ	מֹמ	מֹם	: מֹמ	5 5 5	) b =	; j ;		Ď Ď	ő	5 5	5 5 5	őő	ğ ğ	B E	Ď	ăă	Ď	355	555	ğ
9999999				444	444																									4
0 0 0 0 4 4 4 4 5 5 5 5 5 5 5 5	H H 24				102	103	104	105	105	105	106	10.	010	100	100	904	100	10	10	10	1 11 1	101	110	110	111	112	112	112	113	113
3, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8,	8 8 9 9 9 9 9 1 1 1 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	8 100 8 100 8 100	88 100	88 88	0 00 00	<b></b>		ο σο σ	000 cc	တေထ	ജെ	ထထ	യ <b>യ</b> ദ	၀ တ ထ	) co co	oooα	ာထာထ	ထထ	<b>6</b> 0 60	σο α	000	000	သ ထ	∞ α		യയ	<b>a</b> o a	ooo	യെ	œ
6 0.8 98 2 US C C C C C C C C C C C C C C C C C C	0.8 0.8 0.8 0.8 0.8 0.8 99 2 4	0.8 0.8 100 0.8	0.8 100	000000000000000000000000000000000000000	000			0 8 8	000	000	8.0 0.8	8.0 8.0	000 000	0 0 0	000	9 0 0	 	0.0 8.0	8.00	8.00			8.0 0	8 8	000	8. 6. 8. 8.	8.00	900	8.8.	8.0

us-09-667-170a-440.oligo.rai

	2003
	09:10:09
	4
	Nov
-	Tue

Sequence 30, Appl Sequence 9, Appli Sequence 277, App Sequence 23224, A	.,	w (v		40.0	<del>т</del> С	. 4		4 13	. —	. 4		., .	, , ,		1.1	4.				., 0			. 4					• •			• • •		• • •															٠.					-		-
US-09-248-588-39 US-09-406-045-9 US-09-072-596-277 US-09-252-991A-23224	ns-0	0-SD	us-o	us-o	US-09-198-119C-43 US-09-252-991A-1788	US-0	0-SU	US-U9-455-391A-2524 TIS-09-134-001C-5243	US-09-252-991A-1706	US-0	US-09-252-991A-2605	US-09-252-991A-3201	110	US-0	PCT-	US-C	US-09-284-926-7	US-09-252-991A-220	ns-c	US-U9-Z5Z-991A-3Z9	US-09-325-932A-167	US-C	US-09-252-991A-2300	us-c	US-09-252-991A-1917;	118-0	ns-c	US-09-252-991A-2570	US-(	US-09-252-991A-3041 TIC-00-381-488-7	US-C	O-SD	ns-(	US-09-522-964A-2	US-09-252-991A-1806 US-09-252-991A-3259	US-09-252-991A-1873	US-(	US-09-134-001C-4770	ns-(	US-C	ns-(n	ns-(	US-C	20.00	US-09-252-991A-2889	US-(	US-(	US-09-252-991A-3061	-Sn	O-SIL	200	as C	us-(	ns-(	ns-(
142 142 142 142 4 4																																																							
υυυο	9	യ യ	יטי	v v	ى م	9	9 (	ט ע	o vo	9	y ·	ωV	א פ	9 6	9	w	9	ωı	φι	שט	o wo	o o	9	9	9	ی م	9	9	9	ωų	9	ωų	م ہ	191	ی م	o vo	y y	9	9	<b>6</b> (	oφ	φ	φι	υQ	οvo	w	9	9	φι	w u	، م	ى م	v	9	9
										2	9	r (	ю σ	١.٥		2	e,	4.1	10.5	10	~ m	ത	0	1.	2 2	J 4	ı LO	9	7	<b>ω</b> σ	30	31	7 60	934	935	37	800	40	41	24.	4. 4. 2. 4.	45	46	ν 4.7	i, 4,	000	51	52	953	954	υ υ ι υ ι	957	958	55	09
0 88 91 0 8 9 9 0 0 8 9 9 1		0 894 895					901	70%	706	06 D			0 0					c 91		0.00			0 0		00.0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0 92	56	01			U C		on o	n on		on o	n on	υ	<b>о</b> (	on o			0 0			υ			-	υ	6
	371, App c	5, Appli	4, Appli	3, Appli	4, Appli	4, Appli	23056, A	4, Appli	39, Appl	4, Appli	1, Appli c	1127, Ap	Z/185, A	17. App3	380, App	226, App c	17156, A	18682, A	18979, A	21845, A	4899. An	160. App	160, App	160, App	160, App	160, App	190, App	614, App	1115, Ap	2, Appli	10, Appl	19415, A	4. Appli	6, Appli	12, Appl c	2, Appli	4, Appli	s, Appin	14, Appl	18316, A	20361, A 22501. A	23425, A	4179, Ap	30362, A	10, Appi 28018, A	1197. Ap	1334, Ap	1337, Ap	2, Appli	23306, A	28280, A	5257, AD	23895, A	1173, Ap	1236, Ap
78, Appl 4, Appli 6 4, Appli 6, Appli	199-637A-371 Sequence 371, App	118-445-5 Sequence 5, Appli c c 597-735-4 Sequence 4, Appli c	444-295-4 Sequence 4, Appli	471-468-3 Sequence 3, Appli	597-732-4 Sequence 4, Appli C 579-185-2 Sequence 2, Appli C	679-185-4 Sequence 4, Appli	252-991A-23056 Sequence 23056, A	597-731-4 Sequence 4, Appli	198-119C-39 Sequence 39, Appl	471-468-4 Sequence 4, Appli	331-793-1 Sequence 1, Appli c	205-258-1127 Sequence 1127, Ap	252-991A-2/185 Sequence 2/185, A	384-162-17 Semience 17. Appl	467-602-380 Sequence 380, App	071-035-226 Sequence 226, App	252-991A-17156 Sequence 17156, A	252-991A-18682 Sequence 18682, A	252-991A-18979 Sequence 18979, A	252-991A-21845 Sequence 21845, A	252-391A-2/523 Sequence 2/523, A	466-033-160 Section 160, App	444-733-160 Sequence 160, App	464-134-160 Sequence 160, App	461-361-160 Sequence 160, App	485-910-160 Sequence 160, App	311-731A-190 Sequence 190, App	732-210-614 Sequence 614, App	732-210-1115 Sequence 1115, Ap	371-505-2 Sequence 2, Appli	020-018-10 Sequence 10, Appl	252-991A-19415 Sequence 19415, A	256-261-2 Sequence 2, Appli 256-261-4 Semience 4. Appli	256-261-6 Sequence 6, Appli	256-261-12 Sequence 12, Appl c	852-299-2 Sequence 2, Appli	852-299-4 Sequence 4, Appli	852-299-12 Semence 12. Appli	852-299-14 Sequence 14, Appl	252-991A-18316 Sequence 18316, A	252-991A-20361 Sequence 20361, A 252-991A-22501 Sequence 22501. A	252-991A-23425 Sequence 23425, A	134-001C-4179 Sequence 4179, Ap	252-991A-30362 Sequence 30362, A	252-9918-28018 Semience 10, Appl	232-331A-28019 Sequence 28019, Ap c	732-210-1334 Sequence 1334, Ap	732-210-1337 Sequence 1337, Ap	405-035-2 Sequence 2, Appli	252-991A-23306 Sequence 23306, A	252-991A-28280 Sequence 28280, A	328-352-4968 Sequence 4968, Ap 134-001C-5257 Sequence 5257, Ap	252-991A-23895 Sequence 23895, A	198-452A-1173 Seguence 1173, Ap	198-452A-1236 Seguence 1236, Ap
3 US-09-135-021-78 Sequence 78, Appl C 3 US-09-135-010A-4 Sequence 4, Appli C 4 US-09-444-871-4 Sequence 4, Appli C	4 US-09-199-637A-371 Sequence 371, App	4 US-09-118-445-5 Sequence 5, Appli c 4 US-09-597-735-4 Sequence 4, Appli c	4 US-09-444-295-4 Sequence 4, Appli	4 US-09-471-468-3 Sequence 3, Appli	4 US-09-597-732-4 Sequence 4, Appli 4 HS-09-679-185-2 Sequence 2, Appli	4 US-09-679-185-4 Sequence 4, Appli	4 US-09-252-991A-23056 Sequence 23056, A	4 US-09-597-731-4 Sequence 4, Appli	4 US-09-198-119C-39 Sequence 39, Appl	4 US-09-471-468-4 Sequence 4, Appli	4 US-09-331-793-1 Sequence 1, Appli	4 US-09-205-258-1127 Sequence 1127, Ap	4 US-U9-252-991A-Z/185 Sequence Z/185, A	4 IIS-09-384-162-17 Semience 17 April C	4 US-08-467-602-380 Sequence 380, App	4 US-09-071-035-226 Sequence 226, App	4 US-09-252-991A-17156 Sequence 17156, A	4 US-09-252-991A-18682 Sequence 18682, A	4 US-09-252-991A-18979 Sequence 18979, A	4 US-09-252-991A-21845 Sequence 21845, A	4 US-03-232-331A-2/329 Sequence 2/329, A	1 US-08-466-033-160 Segmence 160. App	2 US-08-444-733-160 Sequence 160, App	2 US-08-464-134-160 Sequence 160, App	2 US-08-461-361-160 Sequence 160, App	2 US-08-485-910-160 Sequence 160, App	4 US-08-311-731A-190 Sequence 190, App	4 US-09-732-210-614 Sequence 614, App	4 US-09-732-210-1115 Sequence 1115, Ap	1 US-08-371-505-2 Sequence 2, Appli	4 US-09-020-018-10 Sequence 10, Appl	4 US-09-252-991A-19415 Sequence 19415, A	1 US-08-256-261-2 Sequence 2, Appli 1 HS-08-256-261-4 Semience 4, Appli	1 US-08-256-261-6 Sequence 6, Appli	1 US-08-256-261-12 Sequence 12, Appl c	3 US-08-852-299-2 Sequence 2, Appli	3 US-08-852-299-4 Seguence 4, Appli	3 US-US-B52-299-6 Sequence 0, Appin 3 IIS-08-852-299-12 Semience 12, Appl	3 US-08-852-299-14 Sequence 14, Appl	4 US-09-252-991A-18316 Sequence 18316, A	4 US-09-252-991A-20361 Sequence 20361, A	4 US-09-252-991A-23425 Sequence 23425, A	4 US-09-134-001C-4179 Sequence 4179, Ap	4 US-09-252-991A-30362 Sequence 30362, A	3 US-184-1849-10 SEQUENCE 10, APP.1 4 HS-19-252-991A-28018 Semience 28018. A	4 US-09-198-452A-1197 Sequence 1197. Ap	4 US-09-732-210-1334 Sequence 1334, Ap	4 US-09-732-210-1337 Sequence 1337, Ap	3 US-09-405-035-2 Sequence 2, Appli	4 US-09-252-991A-23306 Seguence 23306, A	4 US-09-252-99IA-28280 Sequence 28280, A	4 US-09-328-352-4968 Sequence 4968, Ap 4 US-09-134-001C-5257 Sequence 5257, Ap	4 US-09-252-991A-23895 Sequence 23895, A	4 US-09-198-452A-1173 Sequence 1173, Ap	4 US-09-198-452A-1236 Sequence 1236, Ap
US-U9-135-021-78 Sequence 78, Appl C US-09-135-020-4 Sequence 4, Appli C US-09-144-871-4 Sequence 4, Appli C	8 129 4 US-09-199-637A-371 Sequence 371, App C	8 129 4 US-09-118-445-5 Sequence 5, Appli c 8 129 4 US-09-597-735-4 Sequence 4, Appli c	8 129 4 US-09-444-295-4 Sequence 4, Appli	8 129 4 US-09-471-468-3 Sequence 3, Appli	8 129 4 US-09-597-732-4 Sequence 4, Appli C 8 129 4 HS-09-679-185-2 Sequence 2, Appli C	8 129 4 US-09-679-185-4 Sequence 4, Appli	8 129 4 US-09-252-991A-23056 Sequence 23056, A	8 129 4 US-09-59/1-/31-4 Sequence 4 Appli	130 4 US-09-198-1196-39 Sequence 39, Appl	8 130 4 US-09-471-468-4 Sequence 4, Appli	8 130 4 US-09-331-793-1 Sequence 1, Appli C	8 130 4 US-09-205-258-1127 Sequence 1127, Ap	8 130 4 US-09-1252-191A-Z/185 SEQUENCE Z/185, A	2 1.2 1 0.5-00-110-110-1-0 0-04-0-0-0-0 1. April 0	8 133 4 US-08-467-602-380 Sequence 380, App	8 133 4 US-09-071-035-226 Sequence 226, App	8 133 4 US-09-252-991A-17156 Sequence 17156, A	8 133 4 US-09-252-991A-18682 Sequence 18682, A	8 133 4 US-09-252-991A-18979 Sequence 18979, A	8 133 4 US-09-252-991A-21845 Sequence 21845, A	1.5.3 4 102-107-202-203-203-203-203-203-203-203-203-203	153 4 02 02 107 107 107 107 107 107 107 107 107 107	8 134 2 US-08-444-733-160 Sequence 160, App	8 134 2 US-08-464-134-160 Sequence 160, App	8 134 2 US-08-461-361-160 Sequence 160, App	8 134 2 US-US-485-910-160 Sequence 160, App	8 134 4 US-08-311-731A-190 Sequence 190, App	8 135 4 US-09-732-210-614 Sequence 614, App	8 135 4 US-09-732-210-1115 Sequence 1115, Ap	8 136 1 US-08-371-505-2 Sequence 2, Appli	8 136 4 US-09-020-018-10 Sequence 10, Appl	8 136 4 US-09-252-991A-19415 Sequence 19415, A	8 13/ 1 US-U8-256-261-2 Sequence 2, Appli	8 137 1 US-08-256-261-6 Sequence 6, Appli	8 137 1 US-08-256-261-12 Sequence 12, Appl c	8 137 3 US-08-852-299-2 Sequence 2, Appli	8 137 3 US-08-852-299-4 Seguence 4, Appli	8 137 3 115-08-852-299-12 Semience 12. Appl	:8 137 3 US-08-852-299-14 Sequence 14, Appl	.8 137 4 US-09-252-991A-18316 Sequence 18316, A	.8 137 4 US-09-252-991A-20361 Sequence 20361, A 137 4 US-09-252-991A-22501 Sequence 22501. A	.8 137 4 US-09-252-991A-23425 Sequence 23425, A C	.8 138 4 US-09-134-001C-4179 Sequence 4179, Ap	.8 138 4 US-09-252-991A-30362 Sequence 30362, A	.8 139 3 03-09-289-349-10 sequence 10, Appl	.8 139 4 US-09-198-452A-1197 Sequence 1197, Ap	.8 139 4 US-09-732-210-1334 Sequence 1334, Ap	.8 139 4 US-09-732-210-1337 Sequence 1337, Ap	.8 140 3 US-09-405-035-2 Sequence 2, Appli	.8 140 4 US-09-252-991A-23306 Sequence 23306, A	.8 140 4 US-09-252-991A-28280 Sequence 28280, A	.8 140 4 US-09-328-352-4968 Sequence 4968, Ap .8 141 4 US-09-134-001C-5257 Sequence 5257, Ap	.8 141 4 US-09-252-991A-23895 Sequence 23895, A	.8 141 4 US-09-198-452A-1173 Sequence 1173, Ap	.8 141 4 US-09-198-452A-1236 Sequence 1236, Ap

0 0 0 00 000000 0000 00000000 0 0 00

NAME: Cerrone, Michael C REGISTRATION NUMBER: 39,132 REBERENCE/DOCKET NUMBER: PF-0514 US TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELETAX: 650-845-4166 TELETAX: 650-845-4166 TELEX: INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: TYPE: amino acid TYPE: amino acid STRANDEDNESS: single TOPOLOGY: linear INMEDIATE SOURCE: LIBRARY: ESOGTUTO2 CLORE: 2667831 US-09-073-362-1	Alignment Scores: Pred. No.: Pred. No.: Score: Score: Percent Similarity: 100.00% Conservative: 0 Best Local Similarity: 100.00% Mismatches: 0 Best Local Similarity: 1.64% Conservative: 0 Best Local Similarity: 1.64% Mismatches: 0 Best Local Similarity: 1.64% Conservative: 0 Best Local Similarity: 1.64% Mismatches: 0 Best Local Similarity: 1.64% Mismatches: 0 Conservative: 0 Caps: 0 Caps	APPLICANT: HILIMAI, Jennifer L. APPLICANT: Corley, Weil C. ITTLE OF INVENTION: AMINO ACID PERWEASE HOMOLOG NUMBER OF SQUENCES: 3 CORRESPONDENCE ADDRESS: ADDRESSE: Incyte Pharmaceuticals, Inc. STREET: 3174 Porter Drive CITY: Palo Alco CITY: Palo Alco CITY: Palo Alco CONFURY: USA ZIP: 94304 COMPUTER: EMADABLE FORM: MEDIUM TYPE: Diskette COMPUTER: EMACOMALIE FORM: MEDIUM TYPE: Diskette COMPUTER: EMACOMALIE FORM: MEDIUM TYPE: Diskette COMPUTER: TEM COMPATION: MEDIUM TYPE: DISKET CLASSIFICATION NUMBER: US/09/243,920 FILING DATE: APPLICATION NUMBER: US/09/243,920 FILING DATE: APPLICATION NUMBER: 39,132 FILING DATE: APPLICATION NUMBER: 39,132 RESERRENCE/DOCKET NUMBER: 39,132 REGISTRATION NUMBER: 39,1
Sequence 7, Appli Sequence 20158, A Sequence 21119, A Sequence 26017, A Sequence 31393, A Sequence 734, App Sequence 6407, App Patent No. 5208144 Sequence 15, Appli Sequence 9, Appli Sequence 7, Appli Sequence 71, Appli Sequence 71, Appli Sequence 71, Appli Sequence 71803, A Sequence 71803, A Sequence 71803, A Sequence 71803, A Sequence 71803, A Sequence 71803, Appli Sequence 71803, Appli Sequence 71803, Appli Sequence 71803, Appli	Sequence 18, Appl Sequence 18, Appl Sequence 18, Appl Sequence 23969, A Sequence 31686, A Sequence 111, Ap Sequence 2, Appli Sequence 8, Appli Sequence 22323, A Sequence 22323, A Sequence 12591, A Sequence 12591, A Sequence 12591, A Sequence 17, Appli Sequence 17, Appli Sequence 17, Appli Sequence 17, Appli Sequence 2, Appli Sequence 17, Appli Sequence 17, Appli	, t
4 US-08-929-847-7 4 US-09-252-991A-20158 4 US-09-252-991A-21119 4 US-09-252-991A-31193 4 US-09-252-991A-31393 4 US-09-107-532A-6407 6 5208144-35 6 5208144-35 6 US-08-162-402B-15 7 US-09-31-793-9 7 US-09-252-991A-21803 7 US-09-252-991A-21803 7 US-09-252-991A-21803 7 US-09-252-991A-31925 7 US-09-328-352-688-673B-7 7 US-09-328-352-688-673B-7 7 US-09-328-352-688-673B-7 7 US-09-328-352-688-673B-7 7 US-09-328-352-688-673B-7 7 US-09-328-352-688-673B-7	1 US-08-08-08-277-18 2 US-08-550-815-18 3 US-08-703-085-18 4 US-09-453-918-18 4 US-09-453-918-2396-9 4 US-09-252-9918-316-6 4 US-09-252-9918-316-6 4 US-09-252-9918-236-6 5 US-08-842-947-8 5 US-08-842-947-8 7 US-09-252-9918-226-7 7 US-09-252-9918-226-7 7 US-09-252-9918-226-7 7 US-08-075-545-1 1 US-08-075-545-1 1 US-08-075-545-1 2 US-08-075-545-1 3 US-08-855-9128-2 3 US-08-855-9128-2 3 US-08-855-9138-3 3 US-08-852-299-17	ALIGNMENTS  1 73-362-1 73-362-1 73-362-1 TO. 5942399 RAI INFORMATION: FLICANT: Hillman, Jennifer L. FLICANT: Yuc, Henry FLING DANDENESS: ADRESSE: Incyte Pharmaceuticals, Inc. CITY: Palo Alto CONTRY: USA ZIP: 94304 MEDIUM TYEE: OISkette COMPUTER: IBM Compatible COMPUTER: ISM COMPATE: FILING DATE: CLASSIFICATION NUMBER: FILING DATE: TORNEY/AGENT INFORMATION:
	161 161 161 161 162 162 163 163 163 163 163	ation US/0907  ON:   Henry   Jey, Neil C.   ITON: AMINO ACCES.     ADDRESS:   CONTRACT OF CONTROL OF COMPACT OF CONTROL OF COMPACT OF CONTROL OF COMPACT OF
		pplicatio 2399 MATION: Hilman Hilman VENTION: Corley. Corley. Corley. Corley. In Incyt. In Incyt. In Alto O4 AAA AAAABLE F AAABABLE F AAABABLE F AAAAABLE F AAAAABLE F AAAAABLE F AAAAABABLE F AAAAAABABLE F AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
• ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗ ๗	<b>Ე Ა Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე</b> Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე Ე	SULT 1  -09-073-362-1  Sequence 1, Application U  GENERAL INFORMATION: APPLICANT: THILMAN, U  APPLICANT: THILMAN, U  APPLICANT: Corley, Ne  TITLE OF INVENTION: A  NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS ADDRESSEE: INCYLE P  STREET 13174 PORTER  CITY: Palo Alto STREET: 3174 PORTER  COUNTRY: USA COUNTRY: USA CONDUTER: READABLE FORM MEDIUM TYPE: DISKET  COMPUTER: EMADABLE FORM MEDIUM TYPE: IBM COMPA COMPUTER: IBM COMPA OPPRICATION DAA APPLICATION DAA APPLICATION DATA APPLICATION NUMBER: FILING DATE: FILING
0 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 00 00 00 00 00 00 00 00 00 00 00 00	RESULT 1 US-09-073-3 Sequence Sequence Patent NO GENERAL APPLIC COMPUT STAT APPLIC SOFT FILLI

```
TILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: A. Anders Brookes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-071-035-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-071-035-308

Sequence 308, Application US/09071035

Patent No. 6448043

GRERAL INFORMATION:

APPLICANT: Gil H. Choi

TITLE OF INFORMATION:

NUMBER OF SEQUENCES:

CORRESPONDENCE ADDRESS:

ADDRESSE: Human Genome Sciences, Inc.

STREET: 9410 Key West Avenue

CITY: Rockville

STATE: Maryland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOHNSTAIL TROUGHT IN TOUR THE STATE OF THE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90 TyrAlaGluLeuGlyThrThrIleLysLysSerGly 101
                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      517 TAIGCIGAATIGGGAACAACTATAAAGAAATCTGGA 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-667-170A-440 (1-2239) x US-09-732-210-157 (1-67)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-667-170A-440 (1-2239) x US-09-243-920-1 (1-511)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77 GAAAGAAAAAAAAGAGAGAGG 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        43 GluargLysLysLysArgGluarg 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 157, Application US/09732210 Patent No. 6573361 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                 12.00
100.00%
100.00%
1.64%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.00%
100.00%
1.09%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Aquifex aeolicus
STRANDEDNESS: single
                                                                   IMMEDIATE SOURCE:
LIBRARY: ESOGTUT02
CLONE: 2667831
                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-732-210-157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                         TOPOLOGY:
                                                                                                                                                                                   US-09-243-920-1
                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
NESULI 3

US-09-071-035-306

Sequence 306, Application US/09071035

Patent No. 6448043

GENERAL INFORMATION:

APPLICANT: Gil H. Choi

TITLE OF INVENTION: Enterococcus faecalis Polynucleotides and Polypeptides

CORRESPONDENCE ADDRESS:

ADDRESSEE: Human Genome Sciences, Inc.

STREET: 9410 Key West Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Rockville
STATE: Maryland
CONNTR: USA
ZIP: 20850
COMPUTER READABLE FORM:
MEDLUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-667-170A-440 (1-2239) x US-09-071-035-308 (1-241)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       437 AGCACGCCTTAGGAGAGATGAAG 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/071,035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/071,035
FILING DATE:
                                                                                                                                                                                                                             FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: A. Anders Brookes
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: P836;
TELEPHONE: (301) 309-8504
TELEPHONE: (301) 309-8512
INFORMATION FOR SEQ ID NO: 308:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.00%
100.00%
1.12%
                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 241 amino acids TYPE: amino acid
                                                                                                                                              FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
```

```
US-09-073-362-3
; Sequence 3, Application US/09073362
; Patent No. Spalication US/09073362
; Patent No. Spalication:
    APPLICANT: Hillman, Jennifer L.
; APPLICANT: Yue, Henry
APPLICANT: Corley, Neil C.
TITLE OF INVENTION: AMINO ACID PERMEASE HOMOLOG
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                US-09-667-170A-440 (1-2239) x US-09-328-352-6531 (1-332)
                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSED for Windows Version 2.0
CURRENT APPLICATION DATA:
FILING DATE:
                 CURRENT APPLICATION NUMBER: US/09/328,352 CURRENT FILING DATE: 1999-06-04 NUMBER OF SEQ ID NOS: 8252 SEQ ID NO 6531 LENGTH: 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 39,132
REFERNICADOCKET NUMBER: PF-0514 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                          1717 CTGGTACAACTTCCAGTATTTT 1694
                                                                                                                                                                                                                                                                                                                                                                                                                                               30 LeuvalGlnLeuProvalLeuPhe 37
                                                                                                                          TYPE: PRT ORGANISM: Acinetobacter baumannii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 515 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 650-855-055
TELEFAX: 650-845-4166
    FILE REFERENCE: GTC99-03PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLALL
LIBRARY: Genbaurate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Palo Alto
                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94304
                                                                                                                                                                       US-09-328-352-6531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                      No.:
                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-05-198-452A-405

Sequence 405, Application US/09198452A

Sequence 406, Application US/09198452A

Sequence 406, Application US/09198452A

Sequence 406, Application

Sequence 406, Application

Three of INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments

TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevering Reference: 9710-003-999

TITLE OF INVENTION: and treatment of infection

TITLE OF INVENTION: and treatment of infection

TITLE OF INVENTION: 1970-1999

CURRENT APPLICATION VINDER: US/09/198,452A

CURRENT APPLICATION VINDER: 1998-11-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6531, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER;
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPBUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-667-170A-440 (1-2239) x US-09-198-452A-405 (1-325)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-667-170A-440 (1-2239) x US-09-071-035-306 (1-275)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                        Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels:
                                                                                                                                                                                                                                                                                                                      Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY: SITE
LOCATION: 1...325
OTHER INFORMATION: Xaa=unknown or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                380 GAGACTCCCTCAGTAAAGTGACT 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 36,373
REFRENCE/DOCKET NUMBER: PB369P2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEPHONE: (301) 309-8512
INFORMATION FOR SEQ ID NO: 306: SEQUENCE CHARACTERISTICS:
LENGTH: 275 amino acids
TYPE: amino acid
STRADEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             437 AGCACGCCTTAGGAGATGAAG 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125 SerThrProLeuGlyGluMetLys 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT ORGANISM: Chlamydia pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30.2
8.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                            100.00%
                                                                                                                                                                                                                                                                                                                                                                                                         1.12%
                                                                                                                                                                                                                                                                                                                    30.8
                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-071-035-306
                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-328-352-6531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-198-452A-405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 405
LENGTH: 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
                                                                                                                                                                                                                                                                                                                                            Score:
```

ò

us-09-667-170a-440.oligo.rai

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S18
0
0
0
                                                                                                                                                                                                   Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
Mismatches:
Indels:
                                                                                           US-09-667-170A-440 (1-2239) x US-09-073-362-3 (1-515)
                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: DOS SOFTWARE: PSESSO for Windows Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/243,920 FILING DATE: CLASSIFICATION: PRIOR APPLICATION: PRIOR APPLICATION DATA: APPLICATION DATA: APPLICATION DATA: APPLICATION NUMBER: 09/073,362 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-667-170A-440 (1-2239) x US-09-243-920-3 (1-515)
 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,132
REPERENCE/DOCKET UNBER: PF-0514 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
                                                                                                                      517 TATGCTGAATTGGGAACAACTATA 540
                                                                                                                                         98 TyrAlaGluLeuGlyThrThrile 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 515 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
                         100.00%
100.00%
1.09%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.00%
100.00%
1.09%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                      Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MELLERARY: General LIBRARY: 1665759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                            RESULT 9
US-09-243-920-3
                                                                                                                                                                                                                                                                                                                                         STREET:
CITY: Pa
STATE: (
                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-243-920-3
                                                    Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
Pred. No.:
                                                                                                                        ò
```

517 TATGCTGAATTGGGAACAACTATA 540

ò

```
APPLICANT: Lynn A DOUGETTE-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  585
                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 7310
CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-667-170A-440 (1-2239) x US-09-107-532A-4126 (1-585)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READBLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: PC
OPPERATING SYSTEM: <UNKNOWN>
SOFTWARE: SSCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION NUMBER: 60/085,598
FILING DATE: 14 MAY 1998
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 MAY 1998
APPLICATION NUMBER: 60/051571
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Denek
REGISTEATION NUMBER: 40,489
REGISTEATION NUMBER: 40,489
REGISTEATION NUMBER: GOOCKET NUMBER: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...585
SEQUENCE DESCRIPTION: SEQ ID NO: 4126:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGINAL SOURCE: ORIGINAL SOURCE:
98 TyrAlaGluLeuGlyThrThrIle 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
US-09-252-991A-19955
; Sequence 19955, Application US/09252991A
; Patent No. 6551795
; GENERAL INPORMATION:
; APPLICANT: Marc J. Rubenfield et al.
                                                            RESULT 10
US-09-107-532A-4126
; Sequence 4126, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             175 PhePhePheLeuSerPhePheLeu 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90 TTTTTCTTTCTTTCTTTTCTT 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (781) 893-8277
INFORMATION FOR SEQ ID NO: 4126:
SEQUENCE CHARACTERISTICS:
LENGTH: 585 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Waltham
STATE: Massachusetts
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.00%
100.00%
1.12%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-107-532A-4126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
```

```
Sequence 11, Application US/09556273

Patent No. 6312887

GENERAL INFORMATION:
APPLICANT: Vinkemeier, Uwe
APPLICANT: Darnell, Ismail
APPLICANT: Moarefi, Ismail
APPLICANT: Moarefi, Ismail
APPLICANT: Kuriyan, John
TITLE OF INVENTION: A CRYSTAL OF THE N-TERMINAL DOMAIN OF A TITLE OF INVENTION: STAT PROTEIN AND METHODS OF USE THEREOF NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
PLILCATION NUMBER: US/09/556,273
FILING DATE:
                                                                                                                                                                                                                                                   US-09-667-170A-440 (1-2239) x US-09-012-710-11 (1-786)
                                                                                                                           Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Klauber & Jackson
STREET: 411 Hackensack Avenue, 4th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                             Gaps:
                                                                                                                                                                                                                                                                                           766 AATAGCATGAGTGTCAGCTGGAGC 789
                                                                                                                                                                                                                                                                                                                   549 AsnSerMetSerValSerTrpSer 556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/012,710
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-15
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION: TRIPERANTION:
TELECHONE: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                     27.2
8.00
100.00%
100.00%
1.09%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27.2
8.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          786 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 411 Hacker
CITY: Hackensack
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 07601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                   HYPOTHETICAL:
                                                                                 Alignment Scores:
                      ; HYFUIREILI
US-09-012-710-11
                                                                                                                                                                                                                                                                                                                                                                                            US-09-556-273-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-556-273-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                         Query Match:
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS FILES DEFENDATION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS FILES REPERSENCE: 107136-136
CURRENT APPLICATION NUMBER: 108/09/252,991A
CURRENT PILLING DATE: 1999-02-18
PRIOR PILLING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
LENGTH: 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 11, Application US/09012710
Fatent No. 6087478
GENERAL INFORMATION:
APPLICANT: Winkemeier, Uwe
APPLICANT: Winkemeier, Uwe
APPLICANT: Winkemeier, Uwe
APPLICANT: Winkemeier, Uwe
APPLICANT: Marefi, Ismail
APPLICANT: Mariyan, John
TITLE OF INVENTION: STAT PROTEIN AND METHODS.OF USE THEREOF
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Klauber & Jackson
STREET: 411 Hackensack Avenue, 4th Floor
CITY: Hackensack
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-667-170A-440 (1-2239) x US-09-252-991A-19955 (1-613)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
GOMPUTER: IBM PC compatible
OPPRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/012,710
                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTONNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REPERENCE/DOCKET NUMBER: 600-1-194
TELECOMMUNICATION INFORMATION:
TELEFAN: 201-487-5800
TELEFA: 201-487-5800
TELEFA: 201-343-1684
TELEX: 133521
INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
LENGTH: 786 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              434 TGCTCCAGAACACGGGCAGCGTGG 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27 CysserArgThrArgAlaAlaTrp 34
                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                            100.00%
100.00%
1.09%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                        US-09-252-991A-19955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07601
                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JS-09-012-710-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
```

Moarefi, Ismail

```
ò
                                                                                                                                                                                                                                   APPLICANT: Vinkemeier, Uwe
APPLICANT: Warefi, Ismail
APPLICANT: Moarefi, Ismail
APPLICANT: Darnell, Jr., James E.
APPLICANT: Kuriyan, John
TITLE OF INVENTION: A CRYSTAL OF THE N-TERMINAL DOMAIN OF A
TITLE OF INVENTION: STAT PROTEIN AND METHODS OF USE THEREOF
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSE: Klauber & Jackson
STREET: 411 Hackensack Avenue, 4th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/012,710
US-09-667-170A-440 (1-2239) x US-09-556-273-11 (1-786)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 600-1-194
                                                                         549 AsnSerMetSerValSerTrpSer 556
                                                                                                                                                 US-09-012-710-10; Application US/09012710; Patent No. 6087478; GENERAL INFORMATION: APPLICANT: Vinkemeier, Uwe
                                              766 AATAGCATGAGTGTCAGCTGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEFAX: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 793 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.00%
100.00%
1.09%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 201-343-1684
TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . protein
NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Hackensack
STATE: New Jersey
COUNTRY: USA
ZIP: 07601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-012-710-10
```

US-09-667-170A-440 (1-2239) x US-09-012-710-10 (1-793)

766 AATAGCATGAGTGTCAGCTGGAGC 789

549 AsnSerMetSerValSerTrpSer

Mismatches: Indels:

Query Match:

```
APPLICANT: Darmell, Jr., James B.
APPLICANT: Kuriyan, John
TITLE OF INVENTION: A CRYSTAL OF THE N-TERMINAL DOMAIN OF A
TITLE OF INVENTION: STAT PROTEIN AND METHODS OF USE THEREOF
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   793
8
0
                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 07601
ZIP: 07601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURREMY APPLICATION DATA:
APPLICATION NUMBER: US/09/556,273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-667-170A-440 (1-2239) x US-09-556-273-10 (1-793)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                    E: Klauber & Jackson
411 Hackensack Avenue, 4th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Search completed: October 31, 2003, 11:56:36
Job time : 73 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PILING DATE:
CLASSIFICATION:
PILING DATE:
CLASSIFICATION DATA:
PRICR APPLICATION DATA:
APPLICATION NUMBER: 09/012,710
FILING DATE:
ATORNEY/AGENT INFORMATION:
REFERENCE/DOCKET WUMBER: 26,742
REFERENCE/DOCKET WUMBER: 600-1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
""TREPAX: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   766 AATAGCATGAGTGTCAGCTGGAGC 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    549 AsnSerWetSerValSerTrpSer 556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELBEAX: 201 TELEFAX: 201 TELEFAX: 101 TELEFAX: 131521

i INFORMATION FOR SEQ ID NO: 10: SEQUENCE CHARACTERISTICS: LENGTH: 793 amino acids "VPE: Amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.00%
100.00%
1.09%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .. protein
NO
                                                                                                                                                                                                                                                                                                                                                                                                          New Jersey
: USA
                                                                                                                                                                                                                                                                    ADDRESSEE: Klaube
STREET: 411 Hacke
CITY: Hackensack
STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-556-273-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
```

OM nucleic

Run on:

Sequence:

Word size:

Searched:

```
Sequence 587, App Sequence 587, App Sequence 587, App Sequence 313, App Sequence 31, App Sequence 41, App Sequence 47, App Sequence 47, App Sequence 647, App Sequence 87, App Sequence 89, App Sequence 191, App Sequence 191, App Sequence 191, App Sequence 48172, A Sequence 1292, App Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 32398. A Sequence 43316, A Sequence 54, Appl Sequence 14527, A Sequence 14527, A Sequence 14527, A Sequence 184, Appl Sequence 39, Appl Sequence 10, Appl Sequence 17, Appl Sequence 40, Appl Sequence 41, Appl Sequence 43, Appl Sequence 44, Appl Sequence 44, Appl Sequence 10, Appl Sequence 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
5 US-10-163-866-48

0 US-09-183-866-49

0 US-09-824-133-586

0 US-09-824-133-586

5 US-10-144-649A-742

2 US-10-144-849A-742

105-10-144-849A-742

105-10-144-849A-742

105-10-144-867A-11

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-44

105-10-163-866-4
                                                                                                                                                                                                                                                                                                                             ט ט
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Command line parameters:
-MODEL=frame+ n2p.model -DEV=xlp
-Gord_1/USPTO_spool/USO9667170/runat_31102003_105028_11121/app_query.fasta_1.2375
-G-Gord_1/USPTO_spool/USO9667170/runat_31102003_105028_11121/app_query.fasta_1.2375
-DB=Published_Applications_AA -QFPMT=fastan -SUFFIX=oligo.rapb -MINWATCH=0.1
-LOOPCL=0 -LOOPEXX=0 -UNITS=bits -START=1 -END=-1 -MATRIX=oligo
-TRANS=human40.cdi -LIST=1000 -DOCALIGN=200 - THR_SCORE=quality -THR_MIN=1
-ALIGN=15 - MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIXE=500 -MINLEN=0
-MAXLEN=2000000000 - UGBR=USO9667170 @CGN 1, 141 @runat_31102003_105028_11121 ;
-NCPU=5 -NODELS-100 -MARN TINEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60
-LONGLOG -DEV TIMEOUT=120 -WARN TINEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60
                                                                                                                                                                                  (without alignments)
5435.405 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                     2239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
10: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
11: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*
15: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
17: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
18: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
18: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
18: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                   ; Search time 141 Seconds
                     GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd
                                                                                                            protein search, using frame_plus_n2p model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       segs, 171146064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             first 1000 summaries
                                                                                                                                                       October 31, 2003, 11:53:22
                                                                                                                                                                                                                                                                                                                                                                      60.0
60.0
7.0
                                                                                                                                                                                                                                                                                                                                                                    , Ygapext (
, Ygapext (
, Fgapext , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              П
                                                                                                                                                                                                                                                     US-09-667-170A-440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                    60.0
60.0
6.0
6.0
                                        Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Listing
                                                                                                                                                                                                                                                                                                                                                                 Xgapop
Ygapop
Fgapop
Delop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     642050
                                                                                                                                                                                                                                                                                                                                              OLIGO
                                                                                                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
```

Database

Result

Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl	equence 10, equence 10, equence 10, equence 10,	10,	10,	10,	10,	10,	10,	10,	10,	0,0	0,0	10,	9,0	0,0	10,	0,0	0.0	9,0	0,0	0,0	10,	0,0	0,0	0	0.0	00	0	0,0	òò	0,0	50	0,0	0	0 0	0	00	00
594 12 US-10-145-877-10 594 12 US-10-145-958-10 594 12 US-10-146-787-10 594 12 US-10-146-790-10 594 12 US-10-146-790-10 594 12 US-10-147-480-10	12 US- 12 US- 12 US- 12 US-	12 US- 12 US- 12 US-	12 US-	12 US-	12 US-	12 US-:	12 US-	12 US-1	12 US-1	12 US-1	12 US-1 12 US-1	12 US-1	12 US-1	12 US-1	12 US-1 12 US-1	12 US-1	12 US-1	12 US-1	12 US-1 12 US-1	12 US-1	12 US-1	12 US-1 12 US-1	12 US-1 12 US-1	12 US-1	12 US-1	12 US-1 12 US-1	12 US-1	12 US-1 12 US-1	12 US-1	12 US-1 12 US-1	12 US-1	12 US-1	12 US-1	12 US-1	12 US-1	12 US-1	12 US-1 12 US-1
	디디디디	넉넉넉	ᅼᅼ.	ط ط -	. <del></del> .		بنن		r! r	: -; ·	-! -:		! <del>-!</del> -			щ.	! -! -	-ii-	rị rị		· ·	-! -:	٦.	۲.	1+1	-1			н.		1-1-	٠,-	~ -	- -			
∞ ∞ ∞ ∞ ∞ ∞ ·	യയയയ	α α α	<b>დ</b> თ (	သထောထ	0 00 0	0000	ю co c	യയ	ထတ	000	00 00	ထထ	000	ο <b>σ</b> ο	ထထ	ထထ	000	တထ	ထော	ထထ	, ω (	<b>∞</b> ∞	ထော	<b>α</b>	000	သာထ	00 (	<b>20 00</b>	ω (	ဘထ	, со с	0 00	ထင	0 00	ထထ	) co (	00 CO
1447 1488 150 151	153 155 155 156	157 158 159	160 161	162 163 163	* \$5 \text{V}	0 C a	100	171	172	11.	176	177	179	181	182	184 185	111	188 188	189	191	193	195	196 197	8 6 6 Cl =	200	201 202	203	2004	206	208	209	211	212	214	215 216	217	219
Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl	0,000	100,	,0,0	, 0,	10,	000	, 00	, ,	10,	10,	, 0	10,	, 01	000	10,	, 0,	0,0	000	10,	,0,	0,	, 0	, 0,	00	9.0	20	0	,	9,0	00	0 0	0	0 0	0	00	0,0	0
US-10-145-870-10 US-10-145-876-10 US-10-145-959-10 US-10-146-724-10 US-10-146-725-10	147-501- 147-501- 147-504- 147-506-	-147-510- -147-511-	7-14/-5297- -152-397- -153-586-	-158-783- -158-783-	-140-019-	-140-861- -140-862-	-141-697-	-141-705-	-141-758-	-142-418-	-142-422-	-142-427-	-145-821-	-127-840A	-142-761-	-142-763-	-142-887-	-143-034-	-144-957-	-144-992-	-145-090-	-145-629-3	-145-747-1	-145-752-] -145-754-]	-145-755-1 -145-818-1	-145-820-1	-145-872-1 -145-873-1	-147-481-	-147-482-1 -147-503-1	-147-522-1	-152-401-1 -157-783-1	-158-462-1	-158-792-1 -143-035-1	-145-751-1	-145-822-1 -145-824-1	-145-827-1	-145-875-1
2222222	77777	1000	7 7 7	177	175	175	1 1 2	12.5	12	12	175	175	122	12	12	175	122	12	177	17.	12	177	177	12	12	12	12	12	12	12	12	12	177	12	7 7	12	12
Ი Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს Ს	) N N N N ) 0 0 0 0 1 4 4 4 4	, N N N N N N N N N N N N N N N N N N N	5 9 9 9 9 4	594 594	00 00 4 4 4	00 00 44 44	594	594	594	594 494	194	594 44	594 594	00 P	500	594 594	594 594	594 44	9 6	594	ი ი დ დ 4 4	100 R	1 (Q (	0.00 0.04 0.04	ი ი ი ი ი ი	594	ი გი შ	594	594 494	594	594 594	594	0.00 0.00 0.00 0.00	594	594	50 50 50 54 54 54	594
			. <del></del> 		1.1	1.1	н н н	1.1	7.7	T T		 	۲. ۲. ۲. ۲.	1.1	; c; c	1:1	г. г. т.			 		4.	! r! :		ط. ط.ط	1.1	4.4	H.	 	Н	н н н	۲. ۲.	1.1	H -	 	1;1 1:1	1.1
<b>രാ</b> യ യ യ യ യ യ	) co co co c	0 00 00 0	യെ	ထထ	ထထ	ထေထ	ω ω	α α	တ	α α	<b>co</b> o	0 00	<b>c</b> o co	co a	000	000	മാരാ	σ α	000	000	ω ω	α α	000	တ	ထထ	000	00 00	<b>ω</b> (	00 co	ω (	သထ	ထင	0 00	σο σ	ο φ	တ ထ	ω

Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl	10,	aguence 10, aguence 10, aguence 10,	equence 10,	equence 10,	equence 10,	equence 10, equence 10,	equence 10,	equence 10,	equence 10, equence 10,	equence 10,	equence 10,	equence 10,	equence 10,	equence 10,	equence 10,	equence 10, equence 10.	equence 10,	equence 10,	equence 10, equence 10.	equence 10,	equence 10,	equence 10,	equence 10,	equence 10, equence 10.	squence 10,	equence 10,	aquence 10,	equence 10,	equence 10,	equence 10,	equence 10,	equence 10,	equence 10, equence 10,	quence 10,	quence 10,	equence 10,	guence 10,	guence 10,	equence 10,	equence 10,	quence 10,	equence 10,	equence 10,
5 US-1 5 US-1 5 US-1 5 US-1	5 US-10-131-813A-1 5 US-10-131-818A-1 5 US-10-131-823A-1	5 US-10-131-824A-1 5 US-10-131-830A-1 5 US-10-131-837A-1	5 US-10-137-872A-1 5 US-10-147-500-10	5 US-10-1	5 US-10-1	5 US-10-14 5 US-10-14	5 US-10-12 5 US-10-12	5 US-10-1	5 US-10-17	5 US-10-12	S US-10-13	5 US-10-12	5 US-10-1	5 US-10-12 5 US-10-14	5 US-10-14	S US-10-19	S US-10-152-395-10	S US-10-125-930A-1	5 US-10-12 5 US-10-12	S US-10-127-838B-1	S US-10-127-843A-1	5 US-10-127-845A-1 5 US-10-127-846A-1	5 US-10-127-848A-1	5 US-10-127-849A-1 5 US-10-127-850A-1	5 US-10-127-851A-1	S US-10-128-686A-1	5 US-10-128-690A-1	5 US-10-121-819A-1 5 US-10-131-819A-1	S US-10-131-829A-1	5 US-10-131-836A-1 5 US-10-146-729-10	5 US-10-14	5 US-10-14	5 US-10-14	5 US-10-17	5 US-10-12	5 US-10-12	5 US-10-12	5 US-10-12	5 US-10-13	US-10-15	S US-10-12	S US-10-12	S US-10-12
5944 11 11 11 11 11 11 11 11 11 11 11 11 1	सासास	en en en	***			-11 5-11	-11 -11	en e	11 =11	en e					-11 -					e# **	H ==H			4 -4		HH	-4 -																
																																			1.1	4.	1.1	1.1	T. F		1.1	1.1	۲.
<b>ထ ထ ထ ထ ထ</b>	ထာထာတာ	യയയ	ထတ	1 00 00	യെ	တော	တတ		000	σο σ	ο α	ထတ	000	<b></b> 00	ω α	စထ	ω α	, ω (	<b></b>	ω α	ο α	ω α	000	တ	<b>ω</b> α	οω	ω ο	0 00	ω (	သထ	ω	<b>ω</b> α	စ ထ	ω	ω ι	α α	တ	œ (	<b>ω</b> ο	ю co	100	ω (	<b>σ</b> σ
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	$\sigma \sigma \sigma \sigma$	000	00	00	00	) H	-1-	Ц.	<b>⊣</b> ⊢	rtr	1 +1	7	100	20	000	NN	20	100	നന	9 0	m	mr	m (	n m	4 4	4	4 4	4 4	4.	4 4	4	L) U	വ	N.	ມົນ	ഗഗ	CJ (	in i	n u	oω	6	6	ώı
, Appl , Appl , Appl , Appl , Appl																		•									***************************************					•											
Sequence 10 Sequence 10 Sequence 10 Sequence 10 Sequence 10	, , ,	, , , , , ,	10,	10,	10,	10,	10,	10,	, 0	70	101	10,	010	10,	10,	10,	10,	10,	10,	0,0	10,	10,	, 00	10,	10,	10,	, 0,	10,	10,	, 0,	10,	10,	10,	10,	10,	0,0	10,	10,	, 0	10,	10,	10,	-
2-125-805-10 Sequence 1 2-142-889-10 Sequence 1 3-145-874-10 Sequence 1 3-147-497-10 Sequence 1 3-152-371-10 Sequence 1	7-152-374-10 Sequence 10, 7-152-375-10 Sequence 10, 2-152-377-10 Sequence 10, 2-152-377-10	J-152-386-10 J-152-391-10 Sequence 10, J-152-399-10 Sequence 10,	0-156-848-10 Sequence 10, 0-157-785-10 Sequence 10,	0-157-794-10 Sequence 10, 0-157-796-10	0-160-500-10 Sequence 10,	0-121-052-10 Sequence 10,	J-121-053-10 Sequence 10, J-121-054-10 Sequence 10,	0-121-063-10 Sequence 10,	0-123-213-10 Sequence 10,	)-123-291-10 Sequence 10, )-123-322-10 Sequence 10.	0-123-771-10 Sequence 10,	)-123-911-10 Sequence 10, 3-124-821-10 Sequence 10,	3-124-823-10 Sequence 10,	J-125-931-10 Sequence 10, 3-125-932-10 Sequence 10,	0-152-385-10 Sequence 10,	3-152-396-10 Sequence 10,	0-153-552-10 Sequence 10, 0-153-840-10 Sequence 10.	)-156-841-10 Sequence 10,	J-156-842-10 Sequence 10, J-156-844-10 Sequence 10,	0-156-845-10 Seguence 10, 0-156-846-10 Seguence 10, 0-156-846-10	)-028-072-10 Sequence 10,	J-121-049-10 J-123-904-10 Secuence 10.	)-140-470-10 Sequence 10,	3-176-918-10 Sequence 10,	0-176-921-10 Sequence 10,	0-140-474-10 Sequence 10,	)-142-431-10 Sequence 10, 143-114-10	)-140-002-10 Sequence 10,	)-142-419-10 Sequence 10,	)-142-423-10 Sequence 10,	)-121-050-10 Sequence 10,	)-141-755-10 3-143-032-10 Semience 10,	)-123-108-10 Sequence 10,	)-123-236-10 Sequence 10,	0-123-261-10 Sequence 10,	3-140-921-10 Seguence 10, 3-140-928-10 Semience 10.	0-121-045-10 Sequence 10,	3-123-292-10 Sequence 10,	J-123-903-10 Sequence 10, J-124-819-10 Semishre 10	7-124-822-10 Sequence 10,	)-140-925-10 Sequence 10,	0-160-498-10 Sequence 10,	J-124-824-10 Sequence 1
Sequence 1 Sequence 1 Sequence 1 Sequence 1	US-10-152-374-10 Sequence 10, US-10-152-375-10 Sequence 10, US-10-152-377-10 Sequence 10, US-10-152-377-10	US-10-152-391-10 Sequence 10, US-10-152-391-10 Sequence 10, US-10-152-399-10 Sequence 10,	US-10-156-848-10 Sequence 10, US-10-157-785-10 Sequence 10,	US-10-157-794-10 Sequence 10, US-10-157-796-10 Sequence 10.	US-10-160-500-10 Sequence 10, US-10-121-048-10	US-10-121-052-10 Sequence 10,	US-10-121-053-10 Sequence 10, US-10-121-054-10 Sequence 10,	US-10-121-063-10 Sequence 10, IIS-10-123-212-10	US-10-123-213-10 Sequence 10,	US-10-123-291-10 Sequence 10, US-10-123-322-10 Sequence 10.	US-10-123-771-10 Sequence 10,	US-10-123-911-10 Sequence 10, US-16-124-821-10 Sequence 10,	US-10-124-823-10 Sequence 10,	US-10-125-931-10 Sequence 10, US-10-125-932-10 Sequence 10,	US-10-152-385-10 Sequence 10, IS-10-152-383-10	US-10-152-396-10 Sequence 10, US-10-152-396-10	US-10-153-552-10 Sequence 10, US-10-153-840-10 Semience 10.	US-10-156-841-10 Sequence 10,	US-10-155-842-10 Sequence 10, US-10-156-844-10 Sequence 10,	US-10-156-845-10 Seguence 10, US-10-156-846-10	US-10-028-072-10 Sequence 10,	US-10-121-U49-10 Seguence 10, US-10-123-904-10 Seguence 10.	US-10-140-470-10 Sequence 10,	US-10-176-918-10 Sequence 10,	US-10-176-921-10 Sequence 10, US-10-137-865-10	US-10-140-474-10 Sequence 10,	US-10-142-431-10 Sequence 10, IS-10-143-114-10	US-10-140-002-10 Sequence 10,	US-10-142-419-10 Sequence 10,	US-10-123-262-10 Sequence 10, US-10-142-423-10 Sequence 10,	US-10-121-050-10 Sequence 10,	US-10-141-755-10 Seguence 10, US-10-143-032-10	US-10-123-108-10 Sequence 10,	US-10-123-236-10 Sequence 10,	US-10-123-261-10 Sequence 10,	US-10-140-921-10 Segmence 10, US-10-140-928-10 Semience 10.	US-10-121-045-10 Sequence 10,	US-10-123-292-10 Sequence 10,	US-10-123-903-10 Sequence 10, IIS-10-124-819-10	US-10-124-822-10 Sequence 10,	US-10-140-925-10 Sequence 10,	US-10-160-498-10 Sequence 10,	US-10-124-824-10 Sequence 1
12 US-10-125-805-10 Sequence 1 12 US-10-142-89-10 Sequence 1 12 US-10-147-497-10 Sequence 1 12 US-10-147-497-10 Sequence 1 12 US-10-152-371-10 Sequence 1	12 US-10-152-374-10 Sequence 10, 12 US-10-152-375-10 Sequence 10, 12 US-10-152-377-10 Sequence 10, 12 US-10-152-377-10	12 US-10-152-391-10 Sequence 10, 12 US-10-152-391-10 Sequence 10, 12 US-10-152-399-10 Sequence 10,	12 US-10-156-848-10 Sequence 10, 12 US-10-157-785-10 Sequence 10,	12 US-10-157-794-10 Sequence 10, 12 US-10-157-796-10 Sequence 10.	12 US-10-160-500-10 Sequence 10, 12 US-10-121-048-10 Semisors 10	12 US-10-121-052-10 Sequence 10,	12 US-10-121-053-10 Sequence 10, 12 US-10-121-054-10 Sequence 10,	12 US-10-121-063-10 Sequence 10,	12 US-10-123-213-10 Sequence 10,	12 US-10-123-291-10 Sequence 10, 12 US-10-123-322-10 Sequence 10.	12 US-10-123-771-10 Sequence 10,	12 US-10-123-911-10 Sequence 10, 12 US-10-124-821-10 Sequence 10,	12 US-10-124-823-10 Sequence 10,	12 US-10-125-931-10 Sequence 10, 12 US-10-125-932-10 Sequence 10,	12 US-10-152-385-10 Sequence 10,	12 US-10-152-396-10 Sequence 10,	12 US-10-153-552-10 Seguence 10, 12 US-10-153-840-10 Semience 10.	12 US-10-156-841-10 Sequence 10,	12 US-10-156-842-10 Sequence 10, 12 US-10-156-844-10 Sequence 10,	12 US-10-156-845-10 Seguence 10, 12 US-10-156-846-10	15 US-10-028-072-10 Sequence 10,	15 US-10-121-U49-10 Sequence 10, 15 US-10-123-904-10 Semence 10.	15 US-10-140-470-10 Sequence 10,	15 US-10-176-918-10 Sequence 10,	15 US-10-176-921-10 Sequence 10, 15 US-10-137-865-10	15 US-10-140-474-10 Sequence 10,	15 US-10-142-431-10 Sequence 10,	15 US-10-140-002-10 Sequence 10,	15 US-10-142-419-10 Sequence 10,	15 US-10-123-262-10 Sequence 10, 15 US-10-142-423-10 Sequence 10,	15 US-10-121-050-10 Sequence 10,	15 US-10-141-755-10 Sequence 10, 15 US-10-143-032-10	15 US-10-123-108-10 Sequence 10,	15 US-10-123-236-10 Sequence 10,	15 US-10-123-261-10 Sequence 10,	15 US-10-140-921-10 Sequence 10, 15 US-10-140-928-10 Semience 10.	15 US-10-121-045-10 Sequence 10,	15 US-10-123-292-10 Sequence 10,	15 US-10-123-903-10 Sequence 10,	15 US-10-124-822-10 Sequence 10,	15 US-10-140-925-10 Sequence 10,	15 US-10-160-498-10 Sequence 10,	15 US-10-124-824-10 Sequence 1
594 12 US-10-125-805-10 Sequence 1 594 12 US-10-142-889-10 Sequence 1 594 12 US-10-145-874-10 Sequence 1 594 12 US-10-147-497-10 Sequence 1 594 12 US-10-152-371-10 Sequence 1	594 12 US-10-152-374-10 Sequence 10, 594 12 US-10-152-375-10 Sequence 10, 594 12 US-10-152-377-10 Sequence 10, 504 12 US-10-152-377-10	594 12 US-10-152-386-10 Sequence 10, 594 12 US-10-152-391-10 Sequence 10, 594 12 US-10-152-399-10 Sequence 10,	594 12 US-10-156-848-10 Sequence 10, 594 12 US-10-157-785-10 Sequence 10,	594 12 US-10-157-794-10 Sequence 10, 594 12 US-10-157-796-10 Sequence 10.	594 12 US-10-160-500-10 Sequence 10, 594 12 HS-10-121-048-10 Semisor 10	594 12 US-10-121-052-10 Sequence 10,	594 12 US-10-121-053-10 Sequence 10, 594 12 US-10-121-054-10 Sequence 10,	594 12 US-10-121-063-10 Sequence 10, 594 12 US-10-103-212-10	594 12 US-10-123-213-10 Sequence 10,	594 12 US-10-123-291-10 Sequence 10, 594 12 US-10-123-322-10 Sequence 10.	.1 594 12 US-10-123-771-10 Sequence 10,	.1 594 12 US-10-123-911-10 Sequence 10, .1 594 12 US-10-124-821-10 Sequence 10,	.1 594 12 US-10-124-823-10 Sequence 10,	.1 594 12 US-10-125-931-10 Sequence 10, .1 594 12 US-10-125-932-10 Sequence 10,	.1 594 12 US-10-152-385-10 Sequence 10,	.1 594 12 US-10-152-396-10 Sequence 10,	.1 594 12 US-10-153-552-10 Sequence 10, .1 594 12 US-10-153-840-10 Sequence 10.	1 594 12 US-10-156-841-10 Sequence 10,	.1 594 12 US-10-156-842-10 Sequence 10, .1 594 12 US-10-156-844-10 Sequence 10,	.1 594 12 US-10-156-845-10 Seguence 10, .1 594 12 US-10-156-846-10 Semience 10	.1 594 15 US-10-028-072-10 Sequence 10,	.1 594 15 US-10-121-049-10 Seguence 10, .1 594 15 US-10-123-904-10 Seguence 10.	1 594 15 US-10-140-470-10 Sequence 10,	.1 594 15 US-10-176-918-10 Sequence 10,	.1 594 15 US-10-176-921-10 Sequence 10, 1 594 15 US-10-137-865-10	.1 594 15 US-10-140-474-10 Sequence 10,	.1 594 15 US-10-142-431-10 Sequence 10, 1 594 15 US-10-143-114-10	.1 594 15 US-10-140-002-10 Sequence 10,	.1 594 15 US-10-142-419-10 Sequence 10,	.1 594 15 US-10-142-423-10 Sequence 10, .1 594 15 US-10-142-423-10 Sequence 10,	.1 594 15 US-10-121-050-10 Sequence 10,	.1 594 15 US-10-141-755-10 Sequence 10, .1 594 15 US-10-143-032-10 Semience 10	.1 594 15 US-10-123-108-10 Sequence 10,	.1 594 15 US-10-123-236-10 Sequence 10,	.1 594 15 US-10-123-261-10 Sequence 10,	:1 594 15 US-10-140-921-10 Sequence 10, .1 594 15 US-10-140-928-10 Semience 10.	.1 594 15 US-10-121-045-10 Sequence 10,	.1 594 15 US-10-123-292-10 Sequence 10,	.1 594 15 US-10-123-903-10 Sequence 10,	.1 594 15 US-10-124-822-10 Sequence 10,	.1 594 15 US-10-140-925-10 Sequence 10,	.1 594 15 US-10-160-498-10 Sequence 10,	.1 594 15 US-10-124-824-10 Sequence 1
US-10-125-805-10 Sequence 1 US-10-142-889-10 Sequence 1 US-10-147-494-10 Sequence 1 US-10-147-499-10 Sequence 1 US-10-152-371-10 Sequence 1	1.1 594 12 US-10-152-374-10 Sequence 10, 1.1 594 12 US-10-152-375-10 Sequence 10, 1.1 594 12 US-10-152-377-10 Sequence 10, 1.1 594 12 US-10-152-377-10	1.1 594 12 US-10-122/386-10 Sequence 10, 1.1 594 12 US-10-132-399-10 Sequence 10, 1.1 594 12 US-10-152-399-10 Sequence 10,	1.1 594 12 US-10-156-848-10 Sequence 10, 1.1 594 12 US-10-157-785-10 Sequence 10,	1.1 594 12 US-10-157-794-10 Sequence 10, 1.1 594 12 US-10-157-796-10 Sequence 10.	1.1 594 12 US-10-160-500-10 Sequence 10,	1.1 594 12 US-10-121-052-10 Sequence 10,	1.1 594 12 US-10-121-053-10 Sequence 10, 1.1 594 12 US-10-121-054-10 Sequence 10,	1.1 594 12 US-10-121-063-10 Sequence 10,	1.1 594 12 US-10-123-213-10 Sequence 10,	1.1 594 12 US-10-123-291-10 Sequence 10, 1.1 594 12 US-10-123-322-10 Sequence 10.	1.1 594 12 US-10-123-771-10 Sequence 10,	1.1 594 12 US-10-123-911-10 Seguence 10, 1.1 594 12 US-10-124-821-10 Seguence 10,	1.1 594 12 US-10-124-823-10 Sequence 10,	1.1 594 12 US-10-125-931-10 Sequence 10, 1.1 594 12 US-10-125-932-10 Sequence 10,	1.1 594 12 US-10-152-385-10 Sequence 10,	1.1 594 12 US-10-152-396-10 Sequence 10,	1.1 594 12 US-10-153-552-10 Sequence 10, 1.1 594 12 US-10-153-840-10 Semience 10.	1.1 594 12 US-10-156-841-10 Sequence 10,	1.1 594 12 US-10-156-842-10 Sequence 10, 1.1 594 12 US-10-156-844-10 Sequence 10,	1.1 594 12 US-10-156-845-10 Seguence 10, 1.1 594 12 US-10-156-845-10 Semisore 10	1.1 594 15 US-10-028-072-10 Sequence 10,	1.1 594 15 US-10-121-049-10 Seguence 10, 1.1 594 15 US-10-123-904-10 Seguence 10.	1.1 594 15 US-10-140-470-10 Sequence 10,	1.1 594 15 US-10-176-918-10 Sequence 10,	1.1 594 15 US-10-176-921-10 Sequence 10, 1.1 594 15 US-10-137-865-10	1.1 594 15 US-10-140-474-10 Sequence 10,	1.1 594 15 US-10-142-431-10 Sequence 10,	1.1 594 15 US-10-140-002-10 Sequence 10,	1.1 594 15 US-10-142-419-10 Sequence 10,	1.1 594 15 US-10-142-423-10 Sequence 10, 1.1 594 15 US-10-142-423-10	1.1 594 15 US-10-121-050-10 Sequence 10,	1.1 594 15 US-10-141-755-10 Seguence 10, 1.1 594 15 US-10-143-032-10 Semience 10	1.1 594 15 US-10-123-108-10 Sequence 10,	1.1 594 15 US-10-123-236-10 Sequence 10,	1.1 594 15 US-10-123-261-10 Sequence 10,	1.1 594 15 US-10-140-921-10 Seguence 10, 1.1 594 15 US-10-140-928-10 Seguence 10.	1.1 594 15 US-10-121-045-10 Sequence 10,	1.1 594 15 US-10-123-292-10 Sequence 10,	1.1 594 15 HS-10-123-903-10 Sequence 10,	1.1 594 15 US-10-124-822-10 Sequence 10,	1.1 594 15 US-10-140-925-10 Sequence 10,	1.1 594 15 US-10-160-498-10 Sequence 10,	1.1 594 15 US-10-124-824-10 Sequence 1

Sequence 937, App Sequence 42737, A Sequence 4187, Ap Sequence 1187, Ap Sequence 1018, Ap Sequence 1018, Ap Sequence 1018, Ap Sequence 155, App Sequence 155, App	Sequence 37143, A Sequence 109, App Sequence 1489, Ap Sequence 1489, Ap Sequence 1082, App Sequence 1556, Ap Sequence 1556, Ap Sequence 1955, Ap Sequence 1953, Ap Sequence 1953, Ap	Sequence 203, App Sequence 1082, App Sequence 1556, Ap Sequence 1953, Ap Sequence 1912, App Sequence 5140, App Sequence 870, App Sequence 4682, Appli Sequence 4682, App Sequence 2308, Ap Sequence 2308, Ap Sequence 2308, Ap	Sequence 565, App. Sequence 509, App. Sequence 229, App. Sequence 229, App. Sequence 39418, A Sequence 1451, App. Sequence 307,	Sequence 290, App Sequence 290, App Sequence 151, App Sequence 151, App Sequence 2986, Ap Sequence 2986, Ap Sequence 1714, Ap Sequence 329, App Sequence 329, App Sequence 36529, A	Sequence 4846, App Sequence 1736, Ap Sequence 1736, Ap Sequence 473, App Sequence 40902, A Sequence 200, App Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl Sequence 15, Appl Sequence 15, Appl Sequence 15, Appl Sequence 287, Appl Sequence 287, Appl Sequence 287, Appl Sequence 205, Appl Sequence 215, Appl Sequence 215, Appl Sequence 215, Appl Sequence 215, Appl Sequence 215, Appl Sequence 215, Appl Sequence 1125, Appl Sequence 1125, Appl Sequence 1125, Appl Sequence 1125, Appl
нооннонн	0 4 4 4 6 A 4 A A A	ныччни оччнич		ורס הורורורורה הו	99 9 103-09-864-761-86467 95 10 03-09-864-761-86467 99 11 03-09-764-8647-35 101 15 03-10-106-698-4733 106 9 03-09-864-761-40902 107 10 03-09-964-761-40902 107 10 03-09-964-761-40902 107 10 03-09-964-761-45 107 12 03-09-864-761-45 107 15 03-10-252-131-16 107 15 03-10-213-15 110 15 03-10-106-698-857 112 12 03-10-106-698-857 115 12 03-10-106-698-857 115 15 03-10-107-2803-28 117 9 03-09-764-864-1125 118 10 03-09-764-864-1125
000000000	,000000000 ,000000000	000000000000	0.0000000000000000000000000000000000000	000000000000000000000000000000000000000	
rrrrrrr	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>		<i>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</i>	
4. 4. 4. 4. 4. 4. 4. 4. 4.	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	o o o o o o o o o o o o o o o			00 0 0 00 00 00 00 00 00 00 00 00 00 00
	0000000000	Sequence 10, Appl Sequence 10, Appl	Sequence 10, Appl Sequence 10, Appl	1011244 102124 1	Sequence 158, App Sequence 166, App Sequence 177, App Sequence 177, App Sequence 184, App Sequence 156, App Sequence 172, App Sequence 172, App Sequence 172, App Sequence 184, App Sequence 166, App Sequence 166, App Sequence 166, App Sequence 172, App Sequence 172, App Sequence 172, App Sequence 173, App Sequence 172, App Sequence 174, App Sequence 177, App
		- SU	- sn - sn - sn - sn - sn - sn - sn - sn		11 US-09-865-989-158 11 US-09-865-989-166 11 US-09-865-989-167 11 US-09-865-989-177 11 US-09-865-989-177 12 US-01-147-849-156 12 US-10-147-849-166 12 US-10-147-849-166 12 US-10-147-849-166 12 US-10-147-849-166 15 US-10-147-849-177 15 US-10-099-5744-166 15 US-10-099-5744-166 15 US-10-099-5744-166 15 US-10-099-5744-161 15 US-10-099-5744-161 15 US-10-099-5744-161 15 US-10-099-5744-177 15 US-10-099-5744-177 15 US-10-099-5744-177 15 US-10-099-5744-177 11 US-09-983-802-624
					222222222222222222222222222222222222222
444444444					
യ യ യ യ യ യ യ യ യ <b>യ</b>	. co co co co co co co co	, <b>a</b> a a a a a a a a a a a a a	, , , , , , , , , , , , , , , , , , ,	2000000000000	

us-09-667-170a-440.oligo.rapb

~
03
$\sim$
20(
N
σ
ŏ
••
0
$\vdash$
••
~
60
0
4
Nov
Tue

4) 4) 4) 4)	equence 7398, A	Sequence 7, Appl Sequence 164, Ap	- (	Sequence 8.	Sequence 3, Appli	Sequence 11	Sequence 1	~ 1	O U	·	N	$\dot{\mathbf{H}}$	'nα	ήο	ÓM	9	(1)	Ġ,	Ó	A C	2	9	Ñ١	o N	Ψ	N	ο α	9	א ע	0	9 (	1 W	01	ο C	9	21	o c	9	0	9 (	V C	2	9	2	Ø	Ci.	ء ق	7	ÖÖ	equence 6	equence 21	equence 6	quence 2	quence 6
37 15 US-10-167-192-3 37 15 US-10-225-567A-547 37 15 US-10-29-078-21 40 15 US-10-156-761-13234	6 12 US-10-032-585-7398	0 15 US-1 0 15 US-1	3 9 US-09	4 15 US-1	7 9 US-09	5 9 US-U9-815-242-1191 5 15 US-10-198-070-40	5 15 US-1	60-SD 6 0	0 10 US-0	1 15 US-10-08/-34	0 10 US-09-895-913A-286	1 15 US-10-156-761-147	4 10 US-0	4 II US-0	7 10 US-09-738-626-383	1 15 US-1	5 12 US-10-017-161-225	6 10 US-0	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1 6 12 US-1	6 12 US-1	6 12 US-1 6 12 HS-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1 6 12 IIS-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US+1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1	6 12 US-1
7 1.0 33	.0.1	1.0 3	1.0	1.0	1.0	0.11	1.0	1.0	1.0	9.0	1.0	1.0 3	0.1.0	J.C	20.	0.1	1.0 4	1.0	0.1	L.0	1.0	1.0 4	0.0	. 0.	0.	0.1	0.1	1.0 4	0.1	.0.	0.1	.0.	1.0	0.1	1.0 4	1.0	0.1	1.0	1.0 4	1.0	1.0 4.4	0.1.0	1.0 4	1.0 4	1.0 4	1.0	0.1	J. F.	0. H	0.1	0.1	1.0	1.0 4	1.0 4
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	200 201	5 6 5 5 6 3 3 7		0 0 0 0 0 0 0 0 0 0			000	600	602		604	605	606		609 0		611	612	614 614	615	616	617	0 T 0	620	621	623	624	625 625	627	628	630	631	7 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	634	635	63.0	638	639	640	641 747	643	644	645	646	647	84.0	24 n	651	652	653	654	655	929
Sequence 788, App Sequence 177, App Sequence 10432, A Sequence 289, App	6 63,	e 289, e 13,	Sequence 14,	e 14,	170 170	e 141,	e 338,	ο. 4	e 1450	יי פיני	11	- -	e e	יי קיי	9 6	i w	e H	Sequence 1	equence 1,	9 6	Sequence 3	1	ψ, c	) (i)	6.4	equence 6,	n n n	e 11	o o	, w	9 14	ie i	e 42	5 G	496	equence 108	5 d 2 d 2 d	e 57	6 9	ie 15	ກັດ	, c	e 23	e 5	e 106	e 114	ie 278	9 7 G	9 1	96	e 21(	e 8,	ie 5,	ie 6,
122 15 US-10-001-504-788 123 14 US-10-001-857-177 127 9 US-09-815-242-10432 130 10 US-09-731-872-289	11 US-	12 US-	12 US-	15 US-	15 US-	12 US-	11 US-	15 US-	10 US-	15 US-	9 US-0	12 US-	12 US-	12 08-	12 US-	16 US-	12 US-	12 US-	0-8-0	0-SU 6	12 US-	12 US-	10 US-	11 US-	9 US-0	9 US-0	15 US-	12 US-	15 US-	15 US-10-252-646-8	11 US-09-791-279-1	12 US-	10 US-09-747-155-4	12 US-10-017-161-9	9 US-09-815-242-49	9 US-09-815-242-10829	10 US-10-138-781-1	12 US-10-238-075-5	10 US-09-955-866-9	10 US-	12 118-	12 US-09-882-227-2	12 US-10-017-161-2	12 US-	12 US-10-017-161-1	15 US-10-156-761-1	12 US-10-032-201B-	12 US=10=032=201B=	15 US-10-289-737-1 15 US-10-156-761-9	11 US-09-769-787-4	12 US-10-017-161-2	10 US-09-866-230-8	10 US-	12 US-
																_	_	0	٠.		. 0	0	00		0	00	. 0	0	0.0	0.	0.0	. 0	0.0	0.0	0.	0 0	o c	0	0 (	0 0		. 0	_	_	_								0	٥.
, , , , , , , , , , , , , , , , , , ,	0.0	ا جا		۲.			i	ή,	.i .	i	H	ä	.i .		ij	i	۲.	۲,	-i -	-		٦.		<b>i</b>				-	<b>→</b> ←	ı		<b>-</b> 1 ← 1	Ц,	⊣ ←	7	.i.	-ii	તં	급,		i (-	i ed	4	<u>.</u>	д.	.i.	-i -	i -	iri	, 	H	ri	ä	

Sequence 66, Appl Sequence 258, Appl Sequence 258, Appl Sequence 66, Appl Sequence 258, Appl Sequence 66, Appl Sequence 66, Appl Sequence 66, Appl Sequence 258, Appl Sequence 66, Appl Sequence 66, Appl Sequence 258, Appl S	
1.00 4.06 4.00 4.00 4.00 4.00 4.00 4.00 4	12 US-10-158-462-6 12 US-10-158-792-7 12 US-10-143-035-6 12 US-10-143-035-6 12 US-10-143-035-6 12 US-10-145-751-6 12 US-10-145-822-6 13 US-10-145-822-6 14 US-10-145-822-6 15 US-10-145-824-6 16 US-10-145-824-6 17 US-10-145-824-6 18 US-10-145-824-6 19 US-10-145-824-6 10 US-10-145-824-6 11 US-10-145-824-6 12 US-10-145-824-6 13 US-10-145-824-6 14 US-10-145-824-6 15 US-10-145-824-6 16 US-10-145-824-6 17 US-10-145-824-6 18 US-10-145-824-6 19 US-10-145-824-6
たててたたってでです。 、	7 7 7 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
aduence equence equenc	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	12 US-10-142-420-66 Sequence 66, US-10-142-420-66 Sequence 258 US-10-142-420-65 Sequence 258 US-10-142-420-65 Sequence 258 US-10-142-420-258 Sequence 258 US-10-142-420-66 Sequence 66, US-10-142-420-66 Sequence 66, US-10-142-420-66 Sequence 66, US-10-142-760-66 Sequence 258 US-10-145-810-66 Sequence 258 US-10-145-810-66 Sequence 258 US-10-152-231-66 Sequence 258 US-10-127-840A-66 Sequence 258 US-10-127-840A-558 US-10-127-840A-5
12 US-10-145-826-56 12 US-10-145-826-258 12 US-10-145-870-66 13 US-10-145-870-66 14 US-10-145-870-66 15 US-10-145-876-65 15 US-10-145-876-65 16 US-10-145-876-66 17 US-10-145-959-66 18 US-10-146-759-66 19 US-10-146-759-66 10 US-10-146-759-66 10 US-10-146-759-66 11 US-10-146-759-66 12 US-10-147-501-66 13 US-10-147-501-66 14 US-10-147-501-66 15 US-10-147-501-66 16 US-10-147-501-66 17 US-10-147-501-66 18 US-10-147-501-66 19 US-10-147-501-66 10 US	1.0 406 12 US-10-142-420-66 Sequence 66, 1.0 406 12 US-10-142-420-65 Sequence 258 1.0 406 12 US-10-142-420-65 Sequence 258 1.0 406 12 US-10-142-422-56 Sequence 258 1.0 406 12 US-10-142-427-66 Sequence 258 1.0 406 12 US-10-142-427-66 Sequence 66, 1.0 406 12 US-10-142-427-28 Sequence 66, 1.0 406 12 US-10-142-760-66 Sequence 66, 1.0 406 12 US-10-142-760-66 Sequence 258 1.0 406 12 US-10-145-8121-66 Sequence 258 1.0 406 12 US-10-152-531-66 Sequence 258 1.0 406 12 US-10-152-531-66 Sequence 258 1.0 406 12 US-10-152-531-66 Sequence 245 1.0 406 12 US-10-127-840A-66 Sequence 258 1.0 406 12 US-10-127-840A-258 Sequence 258 1.0 406 12 US-

_
Ä
ρц
Ø
rapp
٠
n
й
Υ.
oligo
ユ
o
٠
0
41
440
7
÷.
0a-
_
17
П.
ŧ
7
۵
Ò
7
<u>.</u>
ب
ns-09-667-
Ø
コ

Sequence 25, App. 100 100 100 100 100 100 100 100 100 10	Appl Appl Appl Appl Appl Appl Appl	APP-1	App Appl Appl Appl Appl Appl Appl Appl	App App App App App App App App App App	Appl Appl Appl Appl Appl Appl Appl Appl
	equence 66, aquence 65, aquence 55, aquence 25, aquence 66, aquence 66, aquence 65, aquence 66, aquenc	equence 258 equence 258 equence 258 equence 258 equence 258 equence 65, equence 65, equence 65, equence 65, equence 66, equence 258	equence 258 equence 66, equence 65, equence 65, equence 26, equence 26, equence 25, equence 25, equence 66, equence 66, equence 25, equence 66, equence 26, equence 66,	equence 258 equence 66, equence 258 equence 258 equence 258 equence 258 equence 258 equence 258 equence 66, equence 66, equence 66, equence 66, equence 65,	aquence 65, aquence 258 aquence 65, aquence 66, aquenc
Color   Colo	0.157-779-6 0.157-784-6 0.157-784-6 0.157-797-6 0.158-491-6 0.158-491-6 0.158-491-6 0.158-491-6 0.159-980-6	142-742-742-742-742-742-742-742-742-742-7	0-146-789-25 1147-483-66 1147-496-65 1147-496-25 1147-896-25 1147-505-66 1147-516-26 1152-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66 1157-398-66	109-65	123-1154-56 -123-154-25 -123-154-25 -123-154-25 -123-306-56 -124-814-25 -124-816-66 -124-816-66 -124-816-66 -125-704-66 -125-704-66 -125-927-66 -125-927-66 -125-927-66 -121-046-66
Color   Colo	0000000000		000000000000000		
Color   Colo	4 4 4 4 4 4 4 4 4 4 6 6 6 6 6 6 6 6 6 6	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	00444444444444444444444444444444444444	0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
### 1997 1997 1997 200					
10.00   10.0	нанананан	idadadadadadada			
11.0 (10.0 1.0 10.0 10.0 10.0 10.0 10.0					
1.0 406 12 US-10-145-875-65 Sequence 1.0 406 12 US-10-145-875-65 Sequence 1.0 406 12 US-10-145-875-65 Sequence 1.0 406 12 US-10-145-958-66 Sequence 1.0 406 12 US-10-145-958-66 Sequence 1.0 406 12 US-10-145-958-66 Sequence 1.0 406 12 US-10-146-790-258 Sequence 1.0 406 12 US-10-147-486-56 Sequence 1.0 406 12 US-10-147-496-56 Sequence 1.0 406 12 US-10-157-799-56 Sequence 1.0	00 00 00 00 00 00 00 00 00 00 00 00 00	) TO B B B B B B B B B B B B B B B B B B	99999999999999999999999999999999999999		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1.0 406 12 US-10-145-875-26 Sequence 1.0 406 12 US-10-145-875-26 Sequence 1.0 406 12 US-10-145-875-26 Sequence 1.0 406 12 US-10-145-958-66 Sequence 1.0 406 12 US-10-145-958-66 Sequence 1.0 406 12 US-10-145-958-66 Sequence 1.0 406 12 US-10-146-790-25 Seguence 1.0 406 12 US-10-147-485-26 Seguence 1.0 406 12 US-10-147-486-6 Seguence 1.0 406 12 US-10-147-496-6 Seguence 1.0 406 12 US-10-147-496-28 Seguence 1.0 406 12 US-10-147-594-6 Seguence 1.0 406 12 US-	8, App (8, Appl (8, Appl	8, App 8, App App App 8, App App App App App App App App	8, App Appl Appl Appl Appl Appl 8, Appl 8, Appl 8, Appl 8, Appl 8, Appl 8, Appl 8, Appl 8, Appl 8, Appl 8, Appl	8, App (8, Appl (8, A	Appl Appl Appl Appl Appl S, Appl S, Ap
10.0	Sequence 25 Sequence 66 Sequence 66 Sequence 55 Sequence 25 Sequence 25 Sequence 65 Sequence 65	Sequence 25 Sequence 25 Sequence 25 Sequence 25 Sequence 25 Sequence 65	Sequence 25 Sequence 66 Sequence 66 Sequence 65	Sequence 25 Sequence 26 Sequence 26 Sequence 26 Sequence 25 Sequence 25 Sequence 25 Sequence 25 Sequence 25	Sequence 25
10.0	-869-258 -875-66 -877-66 -877-66 -958-66 -958-66 -787-258	7.790-258 -7.793-66 -7.793-66 -4.803-66 -4.805-66 -4.855-66 -4.865-66 -4.865-66 -4.867-66 -4.867-258 -4.800-66 -4.800-258	-494.258 -4498-66 -514.258 -514.258 -514.258 -524.258 -379-66 -379-66 -379-66 -379-66 -379-66 -379-66 -406-66 -4406-258		7-491-66 7-491-66 7-391-258 7-392-66 7-393-66 7-393-66 7-392-66 7-392-66 7-392-258 7-392-266 7-392-266 7-392-266
	N	35-10-146 35-10-146 35-10-147 35-10-147 35-10-147 35-10-147 35-10-147 35-10-147 35-10-147 35-10-147 36-10-147 36-10-147 36-10-147	18-10-147 18-10-147 18-10-147 18-10-147 18-10-147 18-10-147 18-10-152 18-10-152 18-10-153 18-10-153 18-10-153	JS-10-156 JS-10-157 JS-10-157 JS-10-157 JS-10-157 JS-10-166 JS-10-144 JS-10-147 JS-10-157 JS-10-157 JS-10-157 JS-10-157 JS-10-157 JS-10-157 JS-10-157 JS-10-157 JS-10-157	18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19
	000000000	00000000000000	00000000000000	000000000000000000000000000000000000000	
	ппананны				
		•	~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

ω

```
ACTGAAGAAGTAGAAAACCCTGAAAAAACCATTCCCCTTGCAATATGTATATCCATGGCC 1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1054 ATTGTCACCATTGGCTATGTGCTGACAATGTGGCCTACTTTACGACCATTAATGCTGAG 1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1114 GAGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGGCTACTGGGAAATTTC 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      334 GAGAAAGTGCAGCTGAAGAGGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerTyrAlaGluLeuGlyThrThrIleLysLysSerGlyGlyHisTyrThrTyrIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      136 ProAlaAlaThrAlaVall1eSerLeuAlaPheGlyArgTyrIleLeuGluProPhePhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     754 GTGATGGTCCTAAATAGCATGAGTGTCAGCTGGAGCGCCCGGATCCAGATTTTCTTAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGGCATGTCTCTGACCATCTGGACGGTGTGGGGGTCCTGTCACTATTTGGAGCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTTATGCTGAATTGGGAACAACTATAAAGAAATCTGGAGGTCATTACACATATATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGICTITGGTCCATTACCAGCTTTTGTACGAGTCTGGGTGGAACTCCTCATAATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGCAGCTACTGCTGTGATATCCCTGGCATTTGGACGCTACATTCTGGAACCATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTCAATGTGAAATCCCTGAACTTGCGATCAAGCTCATTACAGCTGTGGGCATAACTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITIGCAAGCICACAGCAATICIGATAATTATAGTCCCTGGAGTTATGCAGCTAATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCAAACGCAGAACTTTAAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256 ThrGluGluValGluAsnProGluLysThrIleProLeuAlaIleCysIleSerMetAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              276 IleValThrIleGlyTyrValLeuThrAsnValAlaTyrPheThrThrIleAsnAlaGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProbeualapheTyrTyrGlyMetTyrAlaTyrAlaGlyTrpPheTyrLeuAsnPheVal
                                                                                                                                                                                                                                                                             501
466
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-667-170A-440 (1-2239) x US-10-163-866-48 (1-501)
                                                                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                        Length:
Matches:
                   60/357,600
            PRIOR APPLICATION NUMBER: US 60/
PRIOR FILING DATE: 2002-02-15
NUMBER OF SEQ ID NOS: 54
SOFTWARE: PatentIn version 3.1
SEQ ID NO 48
LENGTH: 501
                                                                                                                                                                                                                                                                        Pred. No.:
Score:
Score:
Percent Similarity: 100.00%
Best Local Similarity: 100.00%
Query Match: 53.66%
DB:
                                                                                                                                                 TYPE: PRT
CRGANISM: Homo sapiens
US-10-163-866-48
                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   줨
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   업
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-163-866-48

Sequence 48, Application US/10163866

Publication No. US20330027188A1

GENERAL INFORMATION:

APPLICANT: EXELIXIS, INC.

TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE

TITLE OF INVENTION: SLC7s AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE

CURRENT APPLICATION NUMBER: US/10/163,866

CURRENT PILING DATE: 2002-06-05

PRIOR FILING DATE: 2001-06-05

PRIOR PILING DATE: 2001-10-10

PRIOR APPLICATION NUMBER: US 60/338,733

PRIOR FILING DATE: 2001-10-22

PRIOR PILING DATE: 2001-10-22

PRIOR FILING DATE: 2001-10-22

PRIOR FILING DATE: 2001-10-22

PRIOR FILING DATE: 2002-02-15
         66, Appl 258, Appl 258, Appl 266, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2
Sequence 6
Sequence 2
Sequence 2
Sequence 6
Sequence 2
Sequence 2
Sequence 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence Sequence Sequence 2
                                    Sequence
Sequence
Sequence
                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                 Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                   Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Seq
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
              seguence
                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seguence
US-10-123-214-66

US-10-125-805-258

US-10-125-805-258

US-10-125-805-258

US-10-142-889-66

US-10-142-889-66

US-10-145-874-258

US-10-145-874-258

US-10-147-497-258

US-10-147-497-258

US-10-147-497-258

US-10-152-371-66

US-10-152-371-66

US-10-152-371-66

US-10-152-372-258

US-10-152-372-258

US-10-152-372-258

US-10-152-372-258

US-10-152-386-258

US-10-152-386-258

US-10-152-386-258

US-10-152-386-258

US-10-152-386-258

US-10-152-399-66

US-10-152-399-66

US-10-152-399-66

US-10-152-399-258

US-10-152-399-258

US-10-152-399-258

US-10-152-399-258

US-10-152-399-268

US-10-157-794-66

US-10-157-794-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-121-052-258
US-10-121-053-66
US-10-121-053-258
US-10-121-054-66
US-10-121-054-258
US-10-121-063-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-121-063-258

US-10-123-212-66

US-10-123-212-258

US-10-123-213-66

US-10-123-213-258

US-10-123-291-66

US-10-133-213-258

US-10-146-788-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
    \begin{array}{c} 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.000\\ 0.
```

453

75

55

513

95

573 115 135

693

155 753 813

195 873 933

993

275

295

d66.00 Mat core: 466.00 con srcent Similarity: 100.00% Mis set Local Similarity: 100.00% Mis lery Match: 63.66% Ind	15 Gaps: -170A-440 (1-2239) x US-10-163-866-49 (1-501)	334 GAGAAAGTGCAGCTGAAGAGAAAGTCACTTTACTGAGGGGAGTCTCCATTATCATTGGC 3	36 GluLysValGlnLeuLysArgLysValThrLeuLeuArgGlyValSerIleileileGly 394 ACCATCATTGGAGCAGGAATCTTCATCTCTCTAAGGGCGTGCTCCAGAACACGGGCGGC	56 ThrileileGlyAlaGlyIlePheileSerProJysGlyValbeuGlnAsnThrGlySer 7 454 GIGGGCALGTCTCACALCTGGACGTGTGTGGGGTCCTGTCACATTTGGAGCTTTG 5	/b valglymetserleuinriletrp?nrvalcysGlyvalleuSerleupheGlyAlaleu 95	96 574	116 634	136 694	156	176	196 PheCysLysLeuThrAlalleLeullellellelleValProGlyValMetGlnLeulleLys 21	974 GGTCAAACGCGGAACTTTAAAGACGCCTTTTCAGGAAGAGATTCAAGTATTACGCGGTTG 933	934 CCACTGGCTTTTATTATGGAATGTATGCATATGCTGGCTG	994 ACTGAAGAAAGACAAAAACCATTCCCCTTGCAAATATGTATATCCATGGCC 1053	1054 ATTGTCACCATTGGCTATGTGCTGACAATGTGGCCTACTTTACGACCATTAATGCTGAG 11	276 IleValThrIleGlyTyrValLeuThrAsnValAlaTyrPheThrThrIleAsnAlaGlu	1114 GAGGIGGIGGITUGAATIGGGGGGGGGGCGCITITIGIGAGGGGGGTATIGGGAAATITC 1173 296 GluLeuLeuSerAsnAlaValAlaValThrPheSerGluArgLeuLeuGlyAsnPhe 315	1174 TCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTGGCTCCATGAACGGTGGTG 1233 116 Serieul av a Proli - Phe'a a la le la la le la la le la	1234 TTTGCCGTCTCCCGGTTATTCTTGCTCCCTCCGGGGGCTCCCTCC	336 PheAlaValSerArgLeuPheTyrValAlaSerArgGluGlyHisLeuProGlulleLeu 355	1294 TCCATGATTCATGTCCGCAAGGACACTCCTCTACCAGCTGTTATTGTTTTGCACCCTTTG 1353
S B B S	SD DB	<i>\dolday</i>	8 &	8 & 7 			δγ 	90 Å	do oy	9	ପ୍	QY	Qy	qa O	δ ? 	a :	<b>∂</b> 6	Š Š	* &	qu	- V
Db 296 GluLeuLeuSerAsnAlaValAlaValThrPheSerGluArgLeuLeuGlyAsnPhe 315  Qy 1174 TCATTAGCAGTTCCGATCTTTGTTGCCTCTCTGGTTTGGACGTGGACGTGGTGTG 1233	316 SerteuAlavalProllePhevalAlaLeuSerCysPheGlySerMetAsnGlyGlyVal 33	Vy 1234 IIIGCIGICICCAGGITATICTATGCICTCCAGAGGGTCACCTTCCAGAAATCCTC 1293	Qy 1294 TCCATGATTCATGTCCGCAAGCACACTCCTTACCAGCTGTTATTGTTTTGCACCCTTTG 1353  Db 356 SerMetlleHisValArgLysHisThrProLeuProAlaValLeUHisProLeu 375	Oy 1354 ACAATGATATTCTCTGGAGACCTCGACAGTCTTTTGAATTTCCTCAGTTTTGCC 1413	Qy 1414 AGGIGGCITITATIGGGCIGGCAGTIGCIGGGCTCATITATCITCGATACAAAIGCCCA 1473	Oy 1474 GATAIGCAICGICCTITCAAGGIGCCACTGITCAICCCAGCITIGITITCCTICACATGC 1533  Db416 AspMetHisArgProPheLysValProLeuPheIleProAlaLeuPheSerPheThrCys 435	Qy 1534 CICITCAIGGITGCCCITTCCCTCIATICGGACCCCAITTAGTACAGGATTGGCTTCGTC 1593  Db 436 LeuPheMetValAlaLeuSerLeuTyrSerAspProPheSerThrGlyIleGlyPheVal 455	Qy 1594 ATCACTCTGACTGCGCTATTATCTCTTTATTATTATGGGACAAGAAACCCAGG 1653  Db 456 IleThrLeuThrGlyValProAlaTyrTyrLeuPheileIleTrpAspLysEroArg 475	OY 1654 IGGITIAGAAIAAIGICAGAGAAAAAACAGAACAITACAAAIAATACTGGAAGITGTA 1713  Db 476 IrpPheArgileMetSerGluLysileThrargThrLeuGlnIleIleLeuGluValVal 495	OY 1714 CCAGAAGAAGATTA 1731	LD #96 FIGGINGINASPUYSLEN 501 RESULT 2	US-10-163-866-49 ; Sequence 49, Application US/10163866 ; Publication No. US20030027188A1 ; GENERAL INPORMATION:	APPLICANT: EXELIXIS, INC. ITLE OF INVENTION: SLOTS AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE FILE REFERENCE: EXO2-080C CURRENT APPLICATION NUMBER: US/10/163.866	CURRENT FILING DATE: 2002-06-05 PRIOR APPLICATION NUMBER: US 60/296,076 PRIOR FILING DATE: 2001-06-05	; FRIOR AFFLICATION NUMBER: US 60/328,605 ; PRIOR FILING DATE: 2001-10-10 ; PRIOR APPLICATION NUMBER: US 60/338,733 · PRIOR FILING DATE: 2001-10-25	FALOR APPLICATION UNMERR: US 60/357,253  PRIOR FILING DATE: 2002-02-15	PRIOR APPLICATION NUMBER: US 60/357,600 ; PRIOR FILING DATE: 2002-02-15 ; NUMBER OF SEQ ID NOS: 54	; SOFTWARE: Patentin version 3.1 ; SEQ ID NO 49 ; LENGTH: 501	; TYPE: PRT . ORGANISM: Homo sapiens US-10-167-866-49	Alignment Scores:	Pred. No.: 0 Length: 501

```
g
                                                               \delta
                                                                                                                                                              \delta
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                      1413
                                                                                                                                                                                     1473
                                                                                                                                                                                                                                                                                   1533
                                                                                                                                                                                                                                                                                                                                                                                  1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCACTCTGACTGGAGTCCCTGCGTATTATCTTTTATTATGGGACAAGAAACCCAGG 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTTTAGAATAATGTCAGAGAAAATAACCAGAACATTACAAATAATACTGGAAGTTGTA 1713
                                                                                                                                       395
                                                                                                                                                                                                                                   415
SerMet11eHisValArgLysHisThrProLeuProAlaVal11eValLeuHisProLeu 375
                                                                                                                                                                                                                                                                                                     455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               456 ileThrLeuThrGlyValProAlaTyrTyrLeuPhelleileTrpAspLysLysProArg 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTTCATGGTTGCCCTTTTCCTATTCGGACCCATTTAGTACAGGGATTGGCTTCGTC
                                                                                                                                                                                                                                                                                                                                                                                                         1414 AGGTGGCTFTTTATTGGGCTGGCAGTTGCTGGGCTGATTTATCTTCGATACAAATGCCCA
                                                                                                                                                                                                                                                                            GATAIGCAICGICCTIICAAGGIGCCACTGIICAICCCAGCIITGIIIITCCIIICAACAIGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LUNG CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Second Series of Series of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-667-170A-440 (1-2239) x US-09-738-973-586 (1-97)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1714 CCAGAAGAAGATAAGTTA 1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            496 ProGluGluAspLysLeu 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.93e-83
93.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.00%
100.00%
12.70%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Homo
US-09-738-973-586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
US-09-738-973-586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                               1354
                                                                                                                                                                                                                                                                                                                                                                                                                        436
                                                                                                                                                                                                                           396
                                                                                                                                                                                                                                                                            1474
                                                                                                                                                                                                                                                                                                                                                                          1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1654
                                                                                                                        D
                                                                                                                                                                      ò
                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                            \delta
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                               Dp
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

61

GAGGITGAAGTGAGCAGAGATCATGCCAGCGTGGGTGACAGTGAGACTCTGTCTCTCAAACA

```
121
                                                                                                                                122 ATAGATTITATCATATTCTGGATTTTTGGATTCTTTTGGTTTTTCTCATCACTGGATTCAG 181
                                                                                                                                                                                                                     GAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA 241
                                                                                              40
                                                                                                                                                            61 GluSerLeuLeuCysProProSerProLysGluValThrCysArgGluMetLeuThrGly 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 GAATTAAGGAAAAAAGAAAGAAAGAAAAGAGAGAGGAAATTCCAGGCCAATTGTGGC 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122 ATAGATTTTATCATATTCTGGATTTTTTGGATTCTTTTGTTTTCTCATCACTGGATTCAG 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
GluValGluValSerArgAspHisAlaSerLeuGlyAspSerGluThrLeuSerGlnThr
                                           GAATTAAGGAAAAAAGAAAGAAAGAAAAAAGAGGAGGAGAAATTCCAGGCCAATTGTGGC
                                                                                    GluLeuArgLysLysGluArgLysLysLysArgGluArgLysPheGlnAlaAsnCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGGTTGAAGTGAGCAGAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GluvalGluvalSerArgAspHisAlaSerLeuGlyAspSerGluThrLeuSerGlnThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 GluLeuArgLysLysGluArgLysLysLysArgGluArgLysPheGlnAlaAsnCysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 IleAspPheileIlePheTrpIlePheTrpIleLeuLeuPheSerHisHisTrpIleGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182 GAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 GluSerLeuLeuCysProProSerProLysGluValThrCysArgGluMetLeuThrGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lodes, Michael J.
APPLICANT: Mohamath, Raodoh
APPLICANT: Mohamath, Raodoh
APPLICANT: Benson, Robert A.
APPLICANT: Secrist, Heather
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.475C10
CURRENT PPLICANTION NUMBER: US/09/854,133
CURRENT FILING DATE: 2001-05-11
NUMBER OF SEQ ID NOS: 735
SOFTWARE FEASLESQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                          242 GGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGG 280
                                                                                                                                                                                                                                                                                                                                      81 GlyCysLeuProTrpAlaThrArgSerHisLeuGlyArg 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242 GGCTGCCTTCCCTGGGCAACAAGAGCCACCTGGGCAGG 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-667-170A-440 (1-2239) x US-09-854-133-586 (1-97)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 586, Application US/09854133 Publication No. US20020183499A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.93e-83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; SEQ 1D NO 586
; LENGTH: 97
; TYPE: PRT
: ORGANISM: Homo sapiens
US-09-854-133-586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
US-10-144-649A-586
                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-854-133-586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                             62
                                                                                       21
                                                                                                                                                                            4
                                                                                                                                                                                                                     182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
```

```
Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Murine
                       Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-214-867A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-214-867A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                           Score:
                                                                                                                                                                                               ò
                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAAGCCTGTTGTCTCCACCATCTCCAAAGGAGGTTACCTGCAGGAAATGTTAACGGGA 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 GAATTAAGGAAAAAAAAAAAAAAAAAAAAAAGAGAAGAAATTCCAGGCCAATTGTGGC 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GluValGluValSerArgAspHisAlaSerLeuGlyAspSerGluThrLeuSerGlnThr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 GluSerLeuLeuCysProProSerProLysGluValThrCysArgGluMetLeuThrGly 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 GAGGTTGAAGTGAGCAGAATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAACA
                                             APPLICANT: Lodes, Michael J.
APPLICANT: Lodes, Michael J.
APPLICANT: Mang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Algate, Paul A.
APPLICANT: McNeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.475C11
CURRENT FILING DATE: 2002-08-21
NUMBER OF SEQ ID NOS: 749
SOFTWARE: FastsEQ for Windows Version 3.0
: LENGTH: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 742, Application US/10144649A

| Publication No. US20030118599A1
| General Thromwarion |
| APPLICANT: Lodes, Michael J. |
| APPLICANT: Wang, Tongrong |
| APPLICANT: Wang, Tongrong |
| APPLICANT: Ran, Liqun |
| APPLICANT: Algate, Paul A. |
| APPLICANT: Algate, Paul A. |
| APPLICANT: McNeall, Particia D. |
| TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER |
| TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER |
| TITLE OF STORMER: 2002-08-21 |
| CURRENT APPLICATION NUMBER: US/10/144,649A |
| CURRENT APPLICATION NUMBER: US/10/144,649A |
| SEQ ID NO 742 |
| LENGTH: 114 |
| TYPE: PRT |
| CRABNISM: Homo sapiens |
| US-10-144-649A-742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCCAGG 280
                                                                                                                                                                                                                                                                                                                                                                                     0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlyCysLeuProTrpAlaThrArgSerHisLeuGlyArg 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-667-170A-440 (1-2239) x US-10-144-649A-586 (1-97)
                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Sequence 586, Application US/10144649A Publication No. US20030118599A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                   5.93e-83
93.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                   US-10-144-649A-586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-144-649A-742
                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
```

```
1231 GTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCACCTTCCAGAAATC 1290
                                                                                                                                                                                                                                                                         62 GAATTAAGGAAAAAAAAAAAAAAAAAAAAAAAAGAGAGAGAAATTCCAGGCCAATTGTGGC 121
                                                                                                                                                                                                                                                                                                                                                                  122 ATAGATITIRAICATATICIGGATITITIGGAFICTITITGTTTTCTCATCACTGGATICAG 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                  182 GAAAGCCTGTTGTGTCCACCATCTCCAAAGGAGGTTACCTGCAGGGAAATGTTAACGGGA 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               354
                                                                                                                                                                                                                                                                                                        38 GluLeuArgLysLysGluArgLysLysRargGluArgLysPheGlnAlaAsnCysGly 57
                                                                                                                                                                                                                         GluValGluValSerArgAspHisAlaSerLeuGlyAspSerGluThrLeuSerGlnThr 37
                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: EMDOU, HITOSHI
APPLICANT: EMDOU, HITOSHI
APPLICANT: EMDOU, HITOSHI
TITLE OF INVENTION: SODIUM-INDEPENDENT SMALL NEUTRAL AMINO ACID
TITLE OF INVENTION: GENES THEREOF
TITLE OF INVENTION: GENES THEREOF
FILE REFERENCE: 57793 (71526)
CURRENT APPLICATION NUMBER: US/10/214,867A
PRIOR APPLICATION NUMBER: PCT/JP01/0031
PRIOR FILING DATE: 2002-08-07
PRIOR FILING DATE: 2001-01-09
PRIOR FILING DATE: 2001-01-09
PRIOR FILING DATE: 2000-02-07
NUMBER: OF SEQ ID NOS: 17
                                                                                                                                                                                            GAGGTTGAAGTGAGCAGATCATGCCAGCCTGGGTGACAGTGAGACTCTGTCTCAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             335 ValPheAlaValSerArgLeuPheTyrValAlaSerArgGluGlyHisLeuProGluIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1171 ITCTCATTAGCAGTTCCGATCTTTGCCCCTCCTCCTGCTTTGGCTCCATGAACGGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315 PheSerLeuAlaValProIlePheValAlaLeuSerCysPheGlySerMetAsnGlyGly
    1114
93
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242 GGCTGCCTTCCCTGGGCAACAAGGAGCCACCTGGGCAGG 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98 GlyCysLeuProTrpAlaThrArgSerHisLeuGlyArg 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                502
46
0
0
0
                                                                                                                                               US-09-667-170A-440 (1-2239) x US-10-144-649A-742 (1-114)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-667-170A-440 (1-2239) x US-10-214-867A-13 (1-502)
                                          Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
Mismatches:
Indels:
    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                          Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 13, Application US/10214867A; Publication No. US2003014844A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.36e-36
46.00
100.00%
100.00%
6.28%
5.84e-83
93.00
100.00%
100.00%
```

```
Sequence 587, Application US/09854133

Publication No. US20020183499A1

GENERAL INFORMATION:
APPLICANT: Lodes, Michael J.
APPLICANT: Mohamath, Raodoh
APPLICANT: Mohamath, Raodoh
APPLICANT: Benson, Robert A.
APPLICANT: Benson, Parin R.
APPLICANT: Secrist, Heather
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: LOMPOSITIONS AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.475C10
CURRENT APPLICANT: 2001-05-11
NUMBER OF SEQ ID NOS: 735
SOFTWARE PASTSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     104 TTCCAGGCCAATTGTGGCATAGATTTTATCATATTCTGGATTTTTGG 151
                                                                                                                                                                                                                                                                                                  APPLICANT: Fling, Steven P.
APPLICANT: Mohamath, Raodoh
APPLICANT: Algate, Paul A.
APPLICANT: Gecrist, Heather
APPLICANT: Indirias, Carol Yoseph
APPLICANT: Benson, Darin R.
APPLICANT: Blilot, Mark
APPLICANT: Mannion, Jane
APPLICANT: Kalos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 PheGinAlaAsnCysGlyIleAspPhellellellePheTrpIlePheTrp 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-667-170A-440 (1-2239) x US-09-738-973-587 (1-16)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 210121.475C9
CURRENT APPLICATION NUMBER: US/09/738,973
CURRENT FILING DATE: 2000-12-14
NUMBER OF SEQ. ID NOS: 587
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                 Sequence 587, Application US/09738973
Patent No. USJO020110563A1
GENERAL INFORMATION:
APPLICANT: Reed, Steven G.
APPLICANT: Henderson, Robert A.
APPLICANT: Fling, Steven P.
APPLICANT: Fling, Steven P.
APPLICANT: Application, Racioh
APPLICANT: Algate, Paul A.
APPLICANT: Algate, Paul A.
APPLICANT: Benson, Darin R.
1291 CTCTCCATGATTCATGTC 1308
                                                   355 LeuSerMetileHisVal 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16.00
100.00%
100.00%
2.19%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.96e-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 587
LENGTH: 16
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEO ID NO 587
LENGTH: 16
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                           US-09-738-973-587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-738-973-587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-854-133-587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-854-133-587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
```

Length:
Matches:
Conservative:
Mismatches:
Indels:

```
Sequence 32531, Application US/10029386
Publication No. US20030194704A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hankel, David R.
APPLICANT: HONAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE: AEOMICA-x-2
CURRENT APPLICAND NUMBER: 105/10/029,386
CURRENT FILING DATE: 2001-11-2.20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers: 1.1
SEQ ID NO 32531
LENGTH: 166
                                                                                                                                                                                                                                                                                                                       Sequence 587, Application US/1014649A

Publication No. US20030118599A1

GENERAL INFORMATION

APPLICANT: Lodes, Michael J.

APPLICANT: Wang, Tongtong

APPLICANT: Wang, Tongtong

APPLICANT: Mang, Tongtong

TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF LUNG CANCER

FILE REFERENCE: 210121.475C11

CURRENT FILING DATE: 2002-08-21

NUMBER OF SEQ ID NOS: 749

SOFTWARE PARESEQ for Windows Version 3.0

SEQ ID NO S87
                                                                                                                                                                                                  104 TICCAGGCCAAFIGIGGCAFAGATITIATCALATICTGGATTTTTGG 151
                                                                                                                                                                                                                             1 PheGlnAlaAsnCysGlyIleAspPheIleIleFheTrp 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     104 IICCAGGCCAAIIGIGGCAIAGAIITITAICAIAIICIGGAIITITIGG 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: MAP TO AL135998.2
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.6
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.5
           940000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 910000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-667-170A-440 (1-2239) x US-10-144-649A-587 (1-16)
                                                                                                                                                         US-09-667-170A-440 (1-2239) x US-09-854-133-587 (1-16)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
                             Matches:
Conservative:
                                                                        Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels:
1.96e-06
16.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.96e-06
16.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens FEATURE:
                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-029-386-32531
                                                                                                                                                                                                                                                                                 RESULT 10
US-10-144-649A-587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-144-649A-587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
RESULT 15
US-09-815-923-16
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-163-866-41

Sequence 41, Application US/10163866

Publication No. US20030027188A1

GENERAL INFORMATION:

APPLICANT: EXELIXIS, INC.

TITLE OF INVENTION: SLC78 AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE

FILE REFRENCE: EXO.080C

CURRENT FILING DATE: 2002-06-05

CURRENT FILING DATE: 2002-06-05

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: 2001-06-05

PRIOR FILING DATE: US 60/328,605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11, Application US/10214867A

Sequence 11, Application US/10214867A

Publication No. US2003014844A1

GENERAL INFORMATION:

APPLICANT: ENDOU, HITOSH

TITLE OF INVENTION: YOSHIKATSU

TITLE OF INVENTION: TRANSPORTERS TRANSPORTING L- AND D-AMINO ACID

TITLE OF INVENTION: GENER THEREOF

FILE REFERENCE: 57783 (712.6)

CURRENT FILING DATE: 2002-08-07

PRIOR APPLICATION NUMBER: DCT/JP01/00031

PRIOR APPLICATION NUMBER: JP 2000-28922

PRIOR APPLICATION NUMBER: JO 2000-28922

PRIOR FILING DATE: 2000-01-09

PRIOR FILING DATE: 2000-02-07

NUMBER OF SEQ ID NOS: 17

SOFTWARE: Patentin Ver: 2.1

SEQ ID NO 11

LENGTH: 511

TYPE: PRI

LENGTH: 511

TYPE: PRI

LENGTH: 511
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1.8

OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 1.8

OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.7

OTHER INFORMATION: EXPRESSED IN FITAL LIVER, SIGNAL = 1.3

OTHER INFORMATION: SWISSPROT HIT: Q9UMO1, EVALUE 9.00e-83
US-10-029-386-32531
                                                                                                                                                                                     166
112
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-667-170A-440 (1-2239) x US-10-029-386-32531 (1-166)
                                                                                                                                                                                                                                                                                                                                                                      US-09-667-170A-440 (1-2239) x US-10-214-867A-11 (1-511)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             517 TAIGCIGAATIGGGAACAACTATAAAGAAAICTGGA 552
                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90 TyrAlaGluLeuGlyThrThrIleLysLysSerGly 101
                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                 0.0149
12.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.0134
12.00
100.00%
100.00%
1.64%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-214-867A-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                      Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .. oN .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                          δ
```

```
GENERAL INVENTATION:

APPLICANT: EXELIXIS, INC.

TITLE OF INVENTION: SLC75 AS MODIFIERS OF THE p53 PATHWAY AND METHODS OF USE

FILE REFERENCE: EXO2-080C

CURRENT APPLICATION NUMBER: US/10/163,866

CURRENT FILING DATE: 2002-06-05

PRIOR FILING DATE: 2001-0-06

PRIOR FILING DATE: 2001-10-10

PRIOR FILING DATE: 2001-10-10

PRIOR FILING DATE: 2001-10-10

PRIOR PRILING DATE: 2001-10-10

PRIOR PRILING DATE: 2002-02-15

PRIOR PRILING DATE: 2002-02-15

NUMBER OF SEQ ID NOS: 54

SOFTWARE: Patentin version 3.1

SEQ ID NO 42

LENGTH: 511
                                                                                                                                                                                                                                                                       511
0000
0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             511
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               517 TATGCTGAATTGGGAACAACTATAAAGAAATCTGGA 552
                                                                                                                                                                                                                                                                                                                                                                                                                                       90 TyrAlaGluLeuGlyThrThrIleLysLysSerGly 101
                                                                                                                                                                                                                                                                                                                                                                                          US-09-667-170A-440 (1-2239) x US-10-163-866-41 (1-511)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-667-170A-440 (1-2239) x US-10-163-866-42 (1-511)
                                                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                         Length:
Matches:
PRIOR FILING DATE: 2001-10-10
PRIOR APPLICATION NUMBER: US 60/338,733
PRIOR FILING DATE: 2001-10-22
PRIOR FILING DATE: 2001-10-22
PRIOR FILING DATE: 2002-02-15
PRIOR FILING DATE: 2002-02-15
PRIOR PILING DATE: 2002-02-15
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Patentin version 3.1
SEQ ID NO 41
TYPE: PRI
                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 42, Application US/10163866
Publication No. US20030027188A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                   12.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0134
12.00
100.00%
100.00%
1.64%
                                                                                                                                                                                                    ) ORGANISM: Homo sapiens
US-10-163-866-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-163-866-42
                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
US-10-163-866-42
```

```
Sequence 16, Application US/09815923

Publication No. US20020197644A1

GENERAL INFORMATION:

APPLICANT: Gill, Sarjeet S.

APPLICANT: Gill, Sarjeet S.

APPLICANT: The Regents of the University of California

ITILE OF INVENTION: Use of Insect Cell Membrane Transporters as No. US20020197644A1e1

TITLE OF INVENTION: Use of Insect Cell Membrane Transporters as No. US20020197644A1e1

TITLE OF INVENTION: Use of Insect Cell Membrane Transporters as No. US20020197644A1e1

TITLE OF INVENTION: Use of Insect Cell Membrane Transporters as No. US20020197644A1e1

CURRENT APPLICATION NUMBER: US/09/815,923

CURRENT PELICATION NUMBER: US/09/815,923

NUMBER OF SEQ ID NOS: 20

SEQ ID NOS: 20

SEQ ID NO 16

LENGTH: 517

TYPE: PRT

ORGANISM: Aedes aegypti

PRATURE:

PRATURE:

COTHER INFORMATION: LAT transporter

US-09-815-923-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          517
11
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-667-170A-440 (1-2239) x US-09-815-923-16 (1-517)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.132
.11.00
100.00%
100.00%
1.50%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

Search completed: October 31, 2003, 12:25:22 Job time : 172 secs

qq